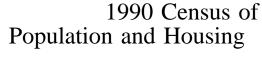
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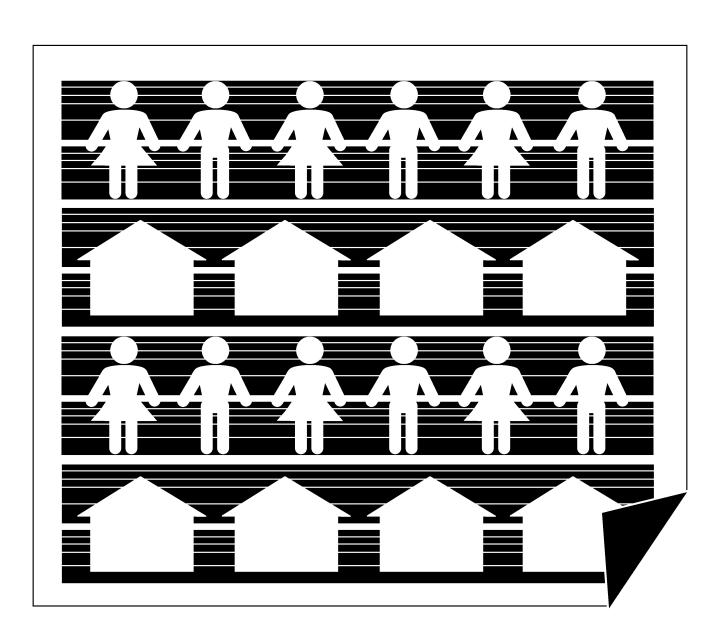
CENSUS'90





**Evaluation and Research Reports** 

Content Reinterview Survey:
Accuracy of Data for
Selected Population and
Housing Characteristics as
Measured by Reinterview



#### **ACKNOWLEDGMENTS**

The Decennial Planning Division, **Susan M. Miskura**, Chief, coordinated and directed all census operations. **Patricia A. Berman**, Assistant Division Chief for Content and Data Products, directed the development and implementation of the 1990 Census Tabulation and Publication Program. Other assistant division chiefs were **Robert R. Bair**, **Rachel F. Brown**, **James L. Dinwiddie**, **Allan A. Stephenson**, and **Edwin B. Wagner**, **Jr. The following branch chiefs made significant contributions: Cheryl R. Landman, Adolfo L. Paez, A. Edward Pike, and William A. Starr. Other important contributors were <b>Linda S. Brudvig**, **Cindy S. Easton**, **Avis L. Foote**, **Carolyn R. Hay**, **Douglas M. Lee**, **Gloria J. Porter**, and **A. Nishea Quash**.

The Decennial Operations Division, Arnold A. Jackson, Chief, was responsible for processing and tabulating census data. Assistant division chiefs were: Donald R. Dalzell, Kenneth A. Riccini, Billy E. Stark, and James E. Steed. Processing offices were managed by Alfred Cruz, Jr., Earle B. Knapp, Jr., Judith N. Petty, Mark M. Taylor, Russell L. Valentine, Jr., Carol A. Van Horn, and C. Kemble Worley. The following branch chiefs made significant contributions: Jonathan G. Ankers, Sharron S. Baucom, Catharine W. Burt, Vickie L. Cotton, Robert J. Hemmig, George H. McLaughlin, Carol M. Miller, Lorraine D. Neece, Peggy S. Payne, William L. Peil, Cotty A. Smith, Dennis W. Stoudt, and Richard R. Warren. Other important contributors were Eleanor I. Banks, Miriam R. Barton, Danny L. Burkhead, J. Kenneth Butler, Jr., Albert A. Csellar, Donald H. Danbury, Judith A. Dawson, Donald R. Dwyer, Beverly B. Fransen, Katherine H. Gilbert, Lynn A. Hollabaugh, Ellen B. Katzoff, Randy M. Klear, Norman W. Larsen, Peter J. Long, Sue Love, Patricia O. Madson, Mark J. Matsko, John R. Murphy, Dan E. Philipp, Eugene M. Rashlich, Willie T. Robertson, Barbara A. Rosen, Sharon A. Schoch, Imelda B. Severdia, Diane J. Simmons, Emmett F. Spiers, Johanne M. Stovall, M. Lisa Sylla, and Jess D. Thompson.

The Housing and Household Economic Statistics Division, Daniel H. Weinberg, Chief, developed the questionnaire content, designed the data tabulations, and reviewed the data for the economic and housing characteristics. Gordon W. Green, Jr., Assistant Division Chief for Economic Characteristics, and Leonard J. Norry, Assistant Division Chief for Housing Characteristics, directed the development of this work. The following branch chiefs made significant contributions: William A. Downs, Peter J. Fronczek, Patricia A. Johnson, Enrique J. Lamas, Charles T. Nelson, and Thomas S. Scopp. Other important contributors were Eleanor F. Baugher, Jeanne C. Benetti, Robert L. Bennefield, Robert W. Bonnette, William S. Chapin, Higinio Feliciano, Timothy S. Grall, Cynthia J. Harpine, Selwyn Jones, Mary C. Kirk, Richard G. Kreinsen, Gordon H. Lester, Mark S. Littman, Wilfred T. Masumura, John M. McNeil, Diane C. Murphy, George F. Patterson, Thomas J. Palumbo, Kirby G. Posey, John Priebe, Anne D. Smoler, and Carmina F. Young.

The Population Division, Paula J. Schneider, Chief, developed the questionnaire content, designed the data tabulations, and reviewed the data for the demographic and social characteristics of the population. Philip N. Fulton, Assistant Division Chief for Census Programs, directed the development of this work. Other assistant division chiefs were Nampeo R. McKenney and Arthur J. Norton. The following branch and staff chiefs made significant contributions: Jorge H. del Pinal, Campbell J. Gibson, Roderick J. Harrison, Donald J. Hernandez, Jane H. Ingold, Martin T. O'Connell, Marie Pees, J. Gregory Robinson, Phillip A. Salopek, Paul M. Siegel, Robert C. Speaker, Gregory K. Spencer, and Cynthia M. Taeuber. Other important contributors were Celia G. Boertlein, Rosalind R. Bruno, Janice A. Costanzo, Rosemarie C. Cowan, Arthur R. Cresce, Larry G. Curran, Carmen DeNavas, Robert O. Grymes, Kristin A. Hansen, Mary C. Hawkins, Rodger V. Johnson, Michael J. Levin, Edna L. Paisano, Sherry B. Pollock, Stanley J. Rolark, A. Dianne Schmidley, Denise I. Smith, and Nancy L. Sweet.

The Data User Services Division, **Gerard C. lannelli,** then Chief, directed the development of data product dissemination and information to increase awareness, understanding, and use of census data. **Marie G. Argana**, Assistant Chief for Data User Services, directed preparation of electronic data products and their dissemination. **Alfonso E. Mirabal**, Assistant Chief for Group Information and Advisory Services, directed activities related to the National Services Program, State Data Centers, and preparation of training materials. The following branch chiefs made significant contributions: **Deborah D. Barrett, Frederick G. Bohme, Larry W.** 

Carbaugh, James P. Curry, Samuel H. Johnson, John C. Kavaliunas, and Forrest B. Williams. Other important contributors were Molly Abramowitz, Celestin J. Aguigui, Barbara J. Aldrich, Delores A. Baldwin, Albert R. Barros, Geneva A. Burns, Carmen D. Campbell, James R. Clark, Virginia L. Collins, George H. Dailey, Jr., Barbara L. Hatchl, Theresa C. Johnson, Paul T. Manka, John D. McCall, Jo Ann Norris, David M. Pemberton, Sarabeth Rodriguez, Charles J. Wade, Joyce J. Ware, and Gary M. Young.

The Geography Division, Robert W. Marx, Chief, directed and coordinated the census mapping and geographic activities. Jack R. George, Assistant Division Chief for Geoprocessing, directed the planning and development of the TIGER System and related software. Robert A. LaMacchia, Assistant Division Chief for Planning, directed the planning and implementation of processes for defining 1990 census geographic areas. Silla G. Tomasi, Assistant Division Chief for Operations, managed the planning and implementation of 1990 census mapping applications using the TIGER System. The following branch chiefs made significant contributions: Frederick R. Broome, Charles E. Dingman, Linda M. Franz, David E. Galdi, Dan N. Harding, Donald I. Hirschfeld, David B. Meixler, Peter Rosenson, Joel Sobel, Brian Swanhart, and Richard Trois. Other important contributors were Gerard Boudriault, Desmond J. Carron, Anthony W. Costanzo, Paul W. Daisey, Beverly A. Davis, Carl S. Hantman, Christine J. Kinnear, Terence D. McDowell, Linda M. Pike, Rose J. A. Quarato, Lourdes Ramirez, Gavin H. Shaw, Daniel L. Sweeney, Timothy F. Trainor, Phyllis S. Willette, and Walter E. Yergen.

The Statistical Support Division, John H. Thompson, Chief, directed the application of mathematical statistical techniques in the design and conduct of the census. John S. Linebarger, Assistant Division Chief for Quality Assurance, directed the development and implementation of operational and software quality assurance. Henry F. Woltman, Assistant Division Chief for Census Design, directed the development and implementation of sample design, disclosure avoidance, weighting, and variance estimation. Howard Hogan and David V. Bateman were contributing assistant division chiefs. The following branch chiefs made significant contributions: Florence H. Abramson, Deborah H. Griffin, Richard A. Griffin, Lawrence I. Iskow, and Michael L. Mersch. Other important contributors were Linda A. Flores-Baez, Larry M. Bates, Somonica L. Green, James E. Hartman, Steven D. Jarvis, Alfredo Navarro, Eric L. Schindler, Carolyn T. Swan, and Glenn D. White.

The 1990 Census Redistricting Data Office, Marshall L. Turner, Jr., Chief, assisted by Cathy L. Talbert, directed the development and implementation of the 1990 Census Redistricting Data Program.

The Administrative and Publications Services Division, Walter C. Odom, Chief, provided direction for the census administrative services, publications, printing, and graphics functions. Michael G. Garland was a contributing assistant division chief. The following branch and staff chiefs made significant contributions: Bernard E. Baymler, Albert W. Cosner, Gary J. Lauffer, Gerald A. Mann, Clement B. Nettles, Russell Price, and Barbara J. Stanard. Other important contributors were Barbara M. Abbott, Robert J. Brown, David M. Coontz, and John T. Overby.

The Data Preparation Division, **Joseph S. Harris**, Chief, provided management of a multi-operational facility including kit preparation, procurement, warehousing and supply, and census processing activities. **Plummer Alston, Jr.,** and **Patricia M. Clark** were assistant division chiefs.

The Field Division, **Stanley D. Matchett**, Chief, directed the census data collection and associated field operations. **Richard L. Bitzer**, **Richard F. Blass**, **Karl K. Kindel**, and **John W. Marshall** were assistant division chiefs. Regional office directors were **William F. Adams**, **John E. Bell**, **LaVerne Collins**, **Dwight P. Dean**, **Arthur G. Dukakis**, **Sheila H. Grimm**, **William F. Hill**, **James F. Holmes**, **Stanley D. Moore**, **Marvin L. Postma**, **John E. Reeder**, and **Leo C. Schilling**.

The Personnel Division, **David P. Warner**, Chief, provided management direction and guidance to the staffing, planning pay systems, and employee relations programs for the census. **Colleen A. Woodard** was the assistant chief.

The Technical Services Division, **C. Thomas DiNenna**, Chief, designed, developed, deployed, and produced automated technology for census data processing.

1990 CPH-E-1

1990 Census of Population and Housing

**Evaluation and Research Reports** 

Content Reinterview Survey:
Accuracy of Data for
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Measured by Reinterview

Issued September 1993



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#### Special Acknowledgments

These data were analyzed and the report was prepared by **Kathryn F. Thomas, Tamara L. Dingbaum,** and **Henry F. Woltman,** Assistant Division Chief for Census Design, under the general supervision of **John H. Thompson,** Division Chief, Decennial Statistical Studies Division. This evaluation was planned and designed by **Kathryn F. Thomas** and **Michael Sinclair** under the supervision of **Jon R. Clark,** Chief of the Census Data Quality Branch and **Henry F. Woltman,** Assistant Division Chief for Census Design.

Computer programming to produce the data comparison tables was done by **Tamara L. Dingbaum** and the Decennial Statistical Studies Division EDP Staff under the direction of **Larry Iskow**. Computer programmers included **Linda Flores-Baez**, **Jerome Garrett**, **Rachel Hall**, and **Greta Holland**. File manipulations were done by programmers in Decennial Management Division.

The Content Reinterview Survey Working Group, chaired by Kathryn Thomas, participated in the planning and implementation of the survey. Working group members include Henry Woltman, Jon Clark, Tamara Dingbaum, Michael Sinclair, Jerome Garrett, Rachel Hall, Annetta Walker, Machell Kindred, and Eric Williams, all of Decennial Statistical Studies Division; Robert T. Smith, Jr. of Business Division; David Whitford, Cathy Hines, George McLaughlin, Faye Nash, Gerard Moore, Peter Long, and Judy Dawson, of Decennial Management Division; Richard Kreinsen and Tom Palumbo of Housing and Household Economic Studies; Sherry Pollock, Nancy Sweet, and Jane Ingold of Population Division; Vaughn Paddock, Pat Rogers, Jan Jaworski, Carol Comisarow, Jan Brown, Caralene McClain, and Neil Ferraiuolo of Field Division; and Steve Tourkin and Cathy Walker of Demographic Surveys Division.

Clerical support was provided by **Rita M. Visnansky, Maria Knittel**, and **Loretta Breen**, Decennial Statistical Studies Division. Coding was done by staff in the Jacksonville Processing Office; keying was done by staff in the Jeffersonville Processing Office. (Note that in 1992, the Statistical Support Division was renamed the Decennial Statistical Studies Division and Decennial Planning Division merged with the Decennial Operations Division to form the Decennial Management Division.)

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# CHAPTER 1. Introduction and Background

#### INTRODUCTION

Evaluation of the quality of the data collected in the 1990 Census of Population and Housing is important for both data users and census planners. Users must have knowledge of the accuracy and reliability of the data to make informed decisions about how errors in the data may affect conclusions drawn. Census planners need similar information to develop and test methods to improve the overall quality of the data produced in future censuses.

Information on the quality of responses for selected population and housing items from the 1990 census is presented in this report. The data presented are based on a survey done uniquely for purposes of measuring response error—the Content Reinterview Survey (CRS). A reinterview survey involves selecting a sample of housing units which were originally enumerated in the census, then conducting a second interview with these same households. Comparisons of data items are made at the address level for housing characteristics and at the person level for population characteristics.

The 1990 census required data collection and processing procedures which were often complex and sometimes subject to error. Some error is introduced when a sample of the population is enumerated for a given item. This type of error is called sampling error. Estimates of sampling error are provided in all census publications. Other errors, called nonsampling errors, can result from the methods used to collect and process the data. Only response errors—those which come from erroneous or unreliable reporting of the characteristics—are evaluated in the CRS. A response error results from the assignment of a housing unit or a person to an incorrect category in a classification system. For example, if a person belongs to the citizenship category "born in the United States," a response error results from the assignment of that person to one of the other citizenship categories (appendix A, item 9 of the census questionnaire). These errors affect census data in a number of ways:

- 1. The errors may introduce bias into the estimate of the population parameter.
- 2. The errors create variability in the classification of an element over repeated trials.
- The errors distort the relationship among the variables.

Response errors may be due to the questionnaire design, the interview mode (mail, telephone, personal visit), the wording of questions, or other causes. These

errors may be accidental due to a misunderstanding of the question, may be introduced purposely, or may arise from insufficient information on the part of respondents to provide accurate answers to a question. The enumerator may affect the accuracy of a response by the way he/ she asks questions or interprets and records responses. Errors introduced at the data processing stage are due primarily to the methods used to fill data items that were left blank during the data collection stage.

The effect of response errors on the quality of the data obtained for a particular category of a data item is reflected by the level of net and gross error associated with that category. For a particular category, response errors produce misclassifications both into and out of the category. The net error associated with a category represents the difference between the number of persons or housing units erroneously included in the category and those erroneously omitted from the category. The gross error represents the sum of those numbers, or the total number of response errors associated with the category. Thus, the net error reflects bias in the category while the gross error reflects the variability in the measurement process.

The 1990 Content Reinterview Survey was designed to provide estimates of response bias and simple response variance associated with many of the questions asked in the 1990 census. The format of the reinterview depended on whether response variance or response bias of the census characteristic was to be measured. To measure response variance, the reinterview attempted to apply the same survey procedures under the same general conditions as the census. To measure response bias, a more detailed questioning sequence was used. This was done to reduce the deficiencies in the original enumeration and to provide more accurate data.

#### **BACKGROUND**

The Content Reinterview Survey (CRS) is the largest content evaluation conducted by the Census Bureau and is part of the 1990 Research, Evaluation, and Experimental (REX) program. A similar survey has been conducted after each decennial census since 1950.

The CRS includes as many census topics as possible while still considering cost and respondent burden. Priority is given to new data items and those which have substantively changed since the previous census. In addition, current applicability of previous census content error evaluations is considered. For some items in the CRS, a set of detailed probing questions allowed gathering data with a

degree of accuracy not possible in the census. That is, the CRS may be viewed as the "preferred" measurement technique. Comparison of the reinterview data with the census provides estimates of response bias present in the census data. Items evaluated using a response-bias (probing) type reinterview include:

Race Place of birth Citizenship Educational attainment

Ancestry
Other languages spoken
Military service status
Class of worker
Disability

Work experience in 1989

Tenure Monthly rent

Meals included in rent Plumbing facilities

Number of autos, vans, and

trucks

Year structure built

Simple response variance was estimated for some items by asking the same question(s) asked in the census. Items evaluated using a response-variance type reinterview include:

Hispanic origin Year of entry School enrollment Employment—industry Description of building

Size of lot

Agricultural sales

Although there is considerable emphasis on geographic detail in census data, an evaluation program cannot provide a separate analysis of each area for which census data are presented without incurring a cost many times that of the census itself. Therefore, only national statistics are presented for this analysis of the accuracy and reliability of the data. Given the size of the CRS sample, it is inappropriate to analyze the data for smaller geographic areas.

Chapter 2 of this report presents a description of the measures of response error which are used to assess the accuracy of selected data items. Interpretations of these measures also are discussed. Chapter 3 discusses all of the housing items which were included in the CRS. Tables of results including summary measures of response error

and discussions of the important findings for each housing characteristic are included. Chapter 4 presents similar data and analysis of the population items. That is followed by a complete description of the design of the Content Reinterview Survey and related operations in chapter 5. The last section of this report, chapter 6, addresses limitations of the survey and the data it collected. Following chapter 6 are a series of tables which present the response error measures for every census item that was evaluated. Appended to the report are facsimiles of the 1990 census questionnaire and the 1990 Content Reinterview Survey questionnaire, the computational formulas for the response error measures, and data comparison tables for the housing and population characteristics.

#### **EDITED CENSUS DATA**

As the final processing step, census data go through a computer edit and allocation program. The edited census data contain imputations for missing data and corrections based on consistency checks. It is impossible to simulate these same edit and imputation procedures on the reinterview data. The census imputation procedures often involve using responses from a geographically adjacent housing unit; in the reinterview sample, an adjacent unit would not exist. Also, in many situations, the questions used in consistency checks in the census are excluded from the reinterview questionnaire.

Most of the data in this report are based on census data before application of the final edit and allocation procedures. Tabulations and response errors are available for the edited census data cross-tabulated with unedited reinterview data. However, they are not presented here as analysis revealed that there is very little difference between the response error measures calculated for the unedited or edited census data. Several of the items in the report (place of birth, ancestry, other languages spoken, and years of military service) are only available as edited data because their write-in responses had to be coded. The coding operation took place after the unedited file was made available. Therefore, edited census data are presented for the analysis of these items.

# CHAPTER 2. Measures of Response Error

### ESTIMATING SIMPLE RESPONSE VARIANCE AND RESPONSE BIAS

Under certain fairly general survey conditions, matching information for identical housing units or persons from two sources, an original interview and a reinterview, can provide estimates of two response error measures. The first of these is simple response variance, and, to the extent that the reinterview data are based on more accurate measurement methods, estimates of the second response error measure, response bias, can be produced. The discussion that follows is not intended to be a rigorous development of the reinterview measures with respect to the assumptions required. It is a general overview. For a more thorough treatment of the topic, see Biemer (1985) and Biemer and Forsman (1992).

Consider the following two models describing the original census and reinterview observations. Let the members of the population be indexed by j and assume:

$$y_{1j} = \mu_j + e_{1j}$$
 \$original interview model\$  
 $y_{2i} = \mu_i + e_{2i}$  \$reinterview model\$

For the j<sup>th</sup> member of the population, this can be expressed as:

In general,  $e_{ij}$  is the deviation of the recorded value  $y_{ij}$  from its true value,  $\mu_{j}$ . For categorical data, that is data where  $\mu_{j}$  is either 0 or 1, the possible values of  $e_{1j}$  and  $e_{2j}$  are 0, 1, or -1. This assumes that in both the original and reinterview survey, the true value  $\mu_{j}$ , for the  $j^{th}$ unit is the same. Of course, the errors  $e_{1j}$  and  $e_{2j}$  may be different for the original and reinterview. This leads to the following assumptions:

$$\begin{split} & E\$e_{1j\$j}\$=B_{1j}\,; \quad EB_{1j}=B_{1}\\ & E\$e_{2j\$j}\$=B_{2j}\,; \quad EB_{2j}=B_{2}\\ & V\$e_{1j\$j}\$=\sigma_{1j}^{2}\,; \quad E\sigma_{1j}^{2}=\sigma_{1}^{2}\\ & V\$e_{2j\$j}\$=\sigma_{2i}^{2}\,; \quad E\sigma_{2i}^{2}=\sigma_{2}^{2} \end{split}$$

 $B_1$  and  $B_2$  represent the response bias of the original and reinterview responses.  $\sigma_1^2$  and  $\sigma_2^2$  are the simple response variance for the original and reinterview responses; they are the average variance of responses from each population member to the same questions over repeated trials.

The means and variances of the errors  $e_{1j}$  and  $e_{2j}$  depend upon the general conditions under which the original interview and reinterview are conducted. The

prevailing political climate or socio-economic conditions in existence at the time of either interview are examples of uncontrolled general conditions that may affect responses. Examples of controlled general conditions that can also affect the responses are interview procedures, questionnaire design and wording, interview mode, experience/ training of the interviewers and the time of the year the interviews are obtained.

Let  $G_1$  and  $G_2$  represent the general conditions that prevailed during the original interview and reinterview, respectively. These conditions give rise to the error distributions  $e_{1j}$  and  $e_{2j}$ . If  $G_1 = G_2$ , that is, if all the general and controlled conditions affecting response error are the same for both the original interview and the reinterview, then, by definition,  $B_1 = B_2$  and  $\sigma_1^2 = \sigma_2^2$ . Similarly, if  $G_1 \neq G_2$ , that is, the general and/or controlled conditions are not the same for the two interviews, then it is not necessarily true that  $B_1 = B_2$  or that  $\sigma_1^2 = \sigma_2^2$ .

Table 2.1 illustrates the results of the comparison of the census data with reinterview data for a sample of n units. The term units is used to denote either a person or a housing unit. A value of 1 is assigned to a unit classified as having some specified characteristic and the value 0, otherwise. Units which have no response in either interview for the characteristic being studied are excluded. Table 2.1 shows that "a" of the units were classified as having the specified characteristic in both the census and the reinterview, "a+ b" were classified as having the characteristic in the reinterview and "a+ c" were classified as having the characteristic in the census.

Table 2.1. Cross-Classification of Census Results by Reinterview Results

Reinterview	Census response (y <sub>1j</sub> )						
response (y <sub>2j</sub> )	1	0	Total				
1	a c	b d	a+ b c+ d				
Total	a+ c	b+ d	n = a+ b+ c+ d				

 $p_1 = \frac{a+c}{n}$  = proportion of units classified as having the characteristic in the census.

 $p_2 = \frac{a+b}{n}$  = proportion of units classified as having the the characteristic in the reinterview.

 $q_1 = 1-p_1 = \frac{b+d}{n} =$  proportion of units classified as not having the characteristic in the census.

 $q_2$  = 1- $p_2$  =  $\frac{c+d}{n}$  = proportion of units classified as not having the characteristic in reinterview.

The net difference rate (NDR) is defined as the expected difference between the estimates of p (p being the percent in class) in the census and reinterview. The expected value equals:

$$E$p_1$p_2$ = $B_1$B_2$$$

The net difference rate (NDR) is estimated by  $\frac{c \cdot b}{n}$ . If the reinterview provides the truth, (i.e.  $B_2 = 0$ ), the net difference rate estimates the bias in the census estimates; however, when the reinterview represents an improved procedure over the original survey (i.e.  $B_2 < B_1$ ), the net difference rate estimates the differential bias of the census and reinterview estimates. That is, the NDR underestimates the actual amount of bias in the census.

Simple response variance (SRV) measures the average variability, across population members, of responses to the same question over repeated trials. If the survey conditions are identical for both the original survey and the reinterview, and the errors are uncorrelated, an unbiased estimator of the SRV is g/2 where g is the rate of gross disagreement (called the gross difference rate) between the census and reinterview. Thus:

$$g = \frac{b+c}{n}$$

and

$$E\$\frac{g}{2}\$ = \frac{1}{2} \{\sigma_1^2 + \sigma_2^2 - 2\sigma_{12}\} \text{ where } \sigma_{12} \text{ is the correlation}$$
 between the errors  $e_{1j}$  and  $e_{2j}$ . If  $\sigma_2^2 = \sigma_1^2$ , and  $\sigma_{12} = o$ , then  $(g/2)$  provides an unbiased estimate of the simple response

variance (SRV) of the census responses.

The impact of SRV on census data is gauged by its magnitude relative to the sum of the sampling variance and simple response variance. This ratio is called the index of inconsistency (I):

$$I = \frac{SRV}{SV + SRV}$$

where SV is the sampling variance. Here, the term sampling variance refers to the variance of the  $(\mu_j + B_{1j})$  values from the census over members of the population.

The denominator of the index of inconsistency, SV + SRV, can be estimated by  $\frac{1}{2}$  \$p<sub>1</sub>q<sub>2</sub> + p<sub>2</sub>q<sub>1</sub>\$. The purpose of pairing p<sub>1</sub> with q<sub>2</sub> is to prevent the erratic and meaningless fluctuations of the index of inconsistency for some questions when the values of p<sub>1</sub> and p<sub>2</sub> differ substantially. Therefore, the estimator of (I) can be written as:

$$\hat{I} = \frac{g/2}{\frac{1}{2} \$ p_1 q_2 + p_2 q_1 \$}$$

$$= \frac{\$ b + c \$ / n}{\$ \frac{a + c}{n} \$ \frac{c + d}{n} \$ + \frac{s a + b}{n} \$ \frac{b + d}{n} \$$$

$$= \frac{b + c}{\frac{1}{n} \$ \$ a + c \$ \$ c + d \$ + \$ a + b \$ \$ b + d \$ \$$$

In this report, all estimates of the index have been multiplied by 100 so that the computed values can be discussed as percentages.

If the reinterview is not an identical repetition of the census procedure, but represents a less error prone and less variable measurement procedure than the census, the gross difference rate (g) is an underestimate of the simple response variance. The estimated index of inconsistency will thus underestimate the true index.

Appendix B provides details on the computational formulas for the net difference rate and index of inconsistency. Since these measures are estimated from a sample, they are subject to sampling error. The formulas used for calculating the 90-percent confidence intervals on these estimates are also provided in appendix B, along with numerical examples of the computations.

### INTERPRETING VALUES OF THE INDEX OF INCONSISTENCY AND THE NET DIFFERENCE RATE

There are several ways of interpreting the estimated index of inconsistency, depending on the methodology used to collect the reinterview data. Although each interpretation uses different terms, each is closely related to the other. The interpretations are:

1. If each of the two observations (the census and the reinterview in this case) is regarded as an independent repetition of the same survey procedure under the same general conditions, the index of inconsistency estimates the ratio of simple response variance to the sum of the sampling variance and simple response variance. In this case, as noted by Biemer (1985), the index of inconsistency measures the impact of misclassification errors on the total variance of an observation.

When identical responses are obtained from observation to observation for each person or housing unit, the simple response variance is zero and the value of the index of inconsistency is zero. When the responses are so variable that simple response variance equals the sum of the sampling variance and the simple response variance, the value of the index is 100.

2. The index of inconsistency may also be interpreted as the complement of a measure of agreement between the census and the reinterview responses. Viewed in this way, the index is the ratio of the observed number of response differences to the number that would occur if the cell counts were formed by a random agreement mechanism based on the observed marginal distributions (census and reinterview). Under this interpretation, the index measures inconsistency (lack of agreement) on a scale from zero (perfect consistency or agreement) to 100 (complete lack of consistency or agreement). When the second observation is not an attempt to repeat the original interview procedure but, may represent an "improved" data source, the estimated index of inconsistency is almost sure to be an understatement of the ratio of the simple response variance of the original interview procedure to the sum of the sampling variance and simple response variance. The interpretation of the index in these terms as given in paragraph 1 is, therefore, questionable. The interpretation of the index given in paragraph 2 is appropriate, however, even when the second observation is not an attempt to repeat the original interview procedure identically.

For the characteristics evaluated by the responsevariance type of reinterview, the interpretation of the index of inconsistency given in paragraph 1 is more appropriate. For the characteristics evaluated by a response-bias type of reinterview, the interpretation given in paragraph 2 for the index of inconsistency is considered to be more appropriate since the reinterview data are expected to be more accurate than the census data.

Values of the index of inconsistency are computed and displayed for each response category in a distribution. For distributions with more than two categories, an index of inconsistency for the entire distribution, referred to as an L-fold index of inconsistency, I<sub>L</sub>, is also displayed. This L-fold index is a weighted average of the individual indexes computed for each category of the distribution. The weights are the values of the total variance for the individual response categories. When there are only two categories in an item, the index of inconsistency and the L-fold index are identical.

It should be noted that the level of the index is sensitive to the number and detail of the categories in a classification system as well as to the distribution of the population over the categories. As the detail of the categories is decreased, the index cannot increase and most likely will decrease. The response variance associated with a particular distribution may be decreased to some extent by collapsing the categories of the distribution. The L-fold index is less sensitive to this collapsing than indexes for the individual categories.

The indexes of inconsistency associated with the distribution are useful in evaluating whether the data collection method is adequate for providing valid measures of the characteristic. For the purpose of evaluating the adequacy of a data-collection system, a general rule of thumb for the interpretation of I and I $_{\rm L}$  is that indexes lower than 20 are small, indicating that response variability is not a major problem for this category or item; indexes between 20 and 50 are moderate, indicating that there is some problem with inconsistent reporting and there is need to improve the question or the data collection method to eliminate the variability in response. Values of the index greater than 50 are an indication that the responses are unreliable and that

(1) improvements are required in the method used to collect these data, (2) the concept itself may not be measurable by census data collection methods, or (3) respondents are not able to provide accurate data to the detail desired. See table 2.2.

The net difference rate, under the assumption that the reinterview measures the true value of a characteristic, gives an estimate of the amount of bias in each category of a data item. However, in most cases, the reinterview may only be an improved measurement procedure and represents more accurate data, on average, than the census, but not necessarily the truth. In this case, the net difference rate provides an underestimate of the bias in the category. Bias in a particular category of a distribution is indicated when the 90 percent confidence interval of the net difference rate does not include zero as a possible value. A positive net difference rate for a particular category indicates that the characteristic was overreported in the census; the estimated percent in class based on the census responses is greater than the estimated percent in class based on reinterview responses. Conversely, a negative net difference rate indicates that the characteristic was underreported in the census; the estimated percent in class based on the census responses is less than the estimated percent in class based on reinterview responses. Guidelines for interpreting the magnitude of a net difference rate, based upon Census Bureau experience, are provided in table 2.2.

Table 2.2. Guidelines for Interpreting the Magnitude of Response Error Measures

Response error measure	Low	Moderate	High
Index of Inconsistency, I L-fold Index of Inconsistency, I <sub>L</sub> Ratio of the net difference rate to the population mean or proportion	< 20 < 20	20-50 20-50	> 50 > 50
(absolute value),   NDR/P	< .01	.0105	> .05

Tables 1, 2, 3, and 4 presented after chapter 6 give the summary measures of response error for each of the analyzed census characteristics. These tables show summary measures of response error for the distributions of unedited census data for each of the categories of an item. The tables give the following measures:

- Total number of recorded responses
- · Percent in class for both the census and reinterview
- Estimated index of inconsistency \$\hat{s}\$ and 90-percent confidence limits
- Estimated L-fold index of inconsistency \$Î\$ and 90percent confidence limits
- Net difference rate and 90-percent confidence limits.

# CHAPTER 3. Evaluation of Responses for Selected Housing Characteristics

#### INTRODUCTION

The housing questions evaluated by the Content Reinterview Survey (CRS) are:

Description of building
Size of lot
Agricultural sales
Tenure
Number of autos, trucks and vans
Monthly rent
Meals included in rent
Year built

Plumbing facilities

The first three of these characteristics received a response variance type reinterview. The remaining items received a response bias type reinterview.

Data comparison tables for each item are presented at the U.S. level in appendix C. Response error measures for all items are presented in table 1 (response variance items), on page 32, and table 2 (response bias items), on page 33, at the U.S. level. These two tables also show summary measures of response error by Black householder, non-Black householder, Spanish/ Hispanic householder, nonSpanish/ Hispanic householder, and non-Black and nonSpanish/Hispanic householder. Each of these subgroups was determined based on census responses. Table E.1 in appendix E shows which census questions were used for this purpose. Facsimiles of both the census and reinterview questions are shown in appendix A. The census and reinterview item numbers from the questionnaire are listed in parentheses following the item name, in this chapter.

### RESULTS FOR HOUSING CHARACTERISTICS WITH RESPONSE VARIANCE TYPE REINTERVIEWS

Only three housing items were reinterviewed by asking the same question as was asked in the census. The three items:

Description of building Size of lot Agricultural sales

showed moderate inconsistency in response between the census and the reinterview.

As shown in table 3.1, where sufficient data are available, the items are reported more consistently by non-Black householders than they are by Black householders.

Table 3.1. Index of Inconsistency Estimated From Response Variance Type Reinterviews

	19	990
Characteristic	L-fold index of inconcis- tency	90-percent confidence interval
Description of building		
Total units  Black householder  Non-Black householder  Spanish/ Hispanic householder  Non-Spanish/ Hispanic householder  Non-Black and non-Spanish/ Hispanic householder	21.9 29.2 21.0 33.2 21.2	21.0 to 23.0 26.3 to 32.6 20.0 to 22.1 29.3 to 37.9 20.2 to 22.3 19.0 to 21.3
Size of lot		
Total units  Black householder  Non-Black householder  Spanish/ Hispanic householder  Non-Spanish/ Hispanic householder  Non-Black and non-Spanish/ Hispanic householder	27.8 67.3 25.4 63.7 27.2	26.4 to 29.4 58.6 to 77.8 23.9 to 27.1 50.3 to 81.6 25.7 to 28.8 23.3 to 26.5
Agricultural sales		
Total units  Black householder  Non-Black householder  Spanish/ Hispanic householder  Non-Spanish/ Hispanic householder  Non-Black and non-Spanish/ Hispanic	41.7  40.0  41.2	36.2 to 48.2 34.5 to 46.4 35.6 to 47.7
householder	39.6	34.0 to 46.1

... Not sufficient data to report response error measures

Non-Spanish householders report more consistently than Spanish householders. The most consistent data for these items came from non-Black non-Spanish householders.

#### **Description of Building**

(Census H2, Reinterview H1)

The item on description of building asked about the type of building and the number of units (apartments) in a structure. Data were also collected for a similar item in the 1980 Reinterview. In both surveys, the data were found to be in the moderately inconsistent range (table 3.2). Although in the same range, the trend for the index is downward, indicating that the 1990 data are a little more consistent.

In 1990, owner occupants reported on building description and the size of their structure with low inconsistency. Responses for renter occupied units were a little more inconsistent as might be expected, since many of these units are in multi-unit structures. For the categories asking about a 1-family house, "a 1-family house detached from

Table 3.2. L-Fold Indexes of Inconsistency

	19	980	1	990	1990-	-Owner	1990—Renter	
Characteristic	L-fold index of inconsis- tency	90-percent confidence interval	L-fold index of inconsis- tency	90-percent confidence interval	L-fold index of inconsis- tency	90- percent confidence interval	L-fold index of inconsis- tency	90-percent confidence interval
Description of building	30.0	26.4 to 33.0	21.9	21.0 to 23.0	18.4	17.0 to 20.0	31.0	29.5 to 32.6

any other house" is reported consistently, but "a 1-family house attached to one or more houses" causes some response problems. This is indicated by the differences in individual indexes of inconsistency for these two categories (9.4 versus 33.8 from table 1, page 32).

#### Size of Lot

(Census H19a, Reinterview H9) and

#### **Agricultural Sales**

(Census H19b, Reinterview H10)

The item on size of lot, asking respondents in single unit housing if their house is on less than 1 acre, was reported with moderate inconsistency between the census and the reinterview (L-fold = 27.8, table 1). This item is used to help classify farm residence.

The other criteria for being classified as a farm residence was the actual sale of agricultural products from the property. Sales of agricultural products must exceed \$1,000 to be classified as a farm residence. This agricultural sales question was asked of all housing units which reported they were on one or more acres. This item on agricultural sales was also reported with moderate inconsistency between the census and CRS, indicating that there is a need to improve the question to eliminate the variability in response (L-fold = 41.7, table 1). Almost 90 percent of the units report to the category "None" and 4.5 percent reported in the largest dollar value category, "\$10,000 or more." While these categories are reported with moderate inconsistency, much of the inconsistency in reporting comes from the responses to the smaller "in between" categories, as might be expected.

A combination of these two questions is used to classify a housing unit as farm residence. Combining data from the two items yield the table 3.3 below.

The index of inconsistency for this table is 34.0, indicating moderate inconsistency between the census and the CRS.

Table 3.3. Nonfarm Versus Farm Residence

Reinterview classification	Census classification				
Reinterview classification	Reported	Nonfarm	Farm		
Reported		<b>7,429</b> <b>7,390</b> 39	147 54 93		

### RESULTS FOR HOUSING CHARACTERISTICS WITH RESPONSE BIAS TYPE REINTERVIEWS

For the remainder of the housing questions:

Tenure
Number of autos, vans, and trucks
Monthly rent
Meals included in rent
Year built
Plumbing facilities

a response bias type reinterview was conducted. More detail on each particular subject was sought.

Table 3.4 shows the 1990 L-fold index of inconsistency for these items and the 1980 index when comparable data are available. Most items exhibited moderate inconsistency in 1990, except tenure and plumbing facilities. The indexes are about the same as those measured in the 1980 census.

#### **Tenure**

(Census H4, Reinterview H2a, H2b)

As noted in [19], tenure provides the count of owner occupied and renter occupied units that is basic to most housing unit tabulations and analyses. Historically, owner-occupancy rates collected in direct interview surveys have been slightly higher than those collected in the census. The 1980 census question included one ownership category and two rental categories. In the 1990 census, in order to improve understanding of the ownership concept, the tenure question was changed to include reference to ownership with a mortgage or loan and ownership without a mortgage; that is, "owned free and clear."

Based on the CRS data, there is an indication that the reported ownership rate is slightly understated in the 1990 census. The inconsistency in the reporting of owner occupied versus renter occupied is in the low range. Table 3.5 shows the net difference rate and index of inconsistency for the collapsed two response category tenure distribution, owner versus renter occupied.

Table 2 shows the response error measures for a more detailed four response category tenure distribution. These data indicate that in comparison to the CRS, the category "Owned by you or someone else in this household with a mortgage or loan" is overstated while the category "Owned by you or someone in this household free and clear (without a mortgage)" is understated in the census. The

Table 3.4. L-Fold Indexes of Inconsistency Estimated From Response Bias Type Reinterviews

Characteristic	19	90	1980		
	L-fold index of inconsistency	90-percent confidence interval	L-fold index of inconsistency	90-percent confidence interval	
Tenure <sup>1</sup> Number of autos, vans, and trucks .  Monthly rent	8.3 32.1 34.7	7.6 to 9.0 31.1 to 33.1 33.1 to 36.4	8.0 autos 34.0 trucks/ vans 26.0	7.2 to 9.1 32.1 to 35.1 24.6 to 28.3	
Meals included in rent Year built² Single units Multi-units Plumbing facilities	27.6 26.2 36.9 53.8	26.7 to 28.6 25.2 to 27.2 34.3 to 39.8 45.1 to 64.2	25.0 43.0 47.0	23.3 to 25.9 39.0 to 48.4 39.6 to 55.7	

<sup>-</sup> Not applicable.

net effect of these differences on the overall owner category, an understatement in the census, is shown in table 3.5. Table 2 also shows that the "Rented for cash rent" category is overstated. No measurable difference exists between the census and the CRS for the "Occupied without payment of cash rent" category.

Analysis of the inconsistent reporting patterns in the census and CRS (table C.4) indicates almost 5 percent of the units reported as "Rented for cash rent" in the census were categorized as "Owned by you or someone in this household with a mortgage or loan" in the CRS. About 85 percent of the occupants in these units indicated by their responses to the reinterview that they, in fact, had a mortgage. These inconsistent reports are a major cause of the apparent difference between the census and the CRS tenure (owner/renter) distribution. These reporting differences could be due to a difference in the time period of the census and CRS interviews.

Table 3.5. Response Error Measures for Tenure:
Owner Occupied Versus Renter Occupied

Tenure	Percer clas		Net differ-	90-percent	Index of incon-	90-percent
	Census	CRS	ence rate	confidence interval	sis- tency	confidence interval
Owner	71.0	71.8	*-0.8	-1.0 to -0.4	8.3	7.6 to 9.0
Renter	29.0	28.2	* 0.8	0.4 to 1.0	8.3	7.6 to 9.0

<sup>\*</sup> Indicates significance at the 10-percent level.

### Number of Autos, Vans and Trucks (Census H13, Reinterview H8a, H8b)

Number of autos, vans and trucks was asked as one question in the 1990 census. Automobiles was asked separately from vans and trucks in the CRS. Comparing the two results, the data were found to be moderately inconsistent (L-fold index = 32.1). In 1980, the two questions were asked individually and the L-fold indexes were about the same level (table 3.4).

While the overall inconsistency is moderate, the more vehicles reported, the more inconsistent the data become. The category "None" is reported most consistently.

Compared to the CRS, there was some evidence of bias in the census data. The category "None" shows overreporting in the census. For households who reported "None" in the census, but reported differently in the reinterview, almost 75 percent reported "1" in the CRS. There is some evidence that the category "4" may be underreported in the census.

#### **Monthly Rent**

(Census H7a, Reinterview H3a, H3b, H3c, H3d, H3e, H3f, H3g) and

#### Meals Included in Rent

(Census H7b, Reinterview H4a, H4b, H4c, H4d)

The census asked monthly rent for respondents who said they pay rent. They could select from 26 categories ranging from "Less than \$80" to "\$1,000 or more." The data were reported with moderate inconsistency between the census and reinterview (L-fold = 34.7). The last two categories, which are the highest dollar amounts and the two broadest categories, are reported more consistently than all the other categories (table 2).

Monthly rent was not evaluated in 1980. In the 1970 reinterview, the rent data were reported consistently with that census. However, the 1970 question only had 14 reporting categories compared to 26 in 1990, so this L-fold index (I=11.0) is not directly comparable to the 1990 data.

Additional probing questions about monthly contract rent were asked in the CRS. About 300 householders, 12 percent of those reporting rent, said that the federal, State or local government pays part of their rent. About 55 percent of them said they included that amount in the rent they reported. The remaining 45 percent said they did not include the amount in their reported rent. Those who did not include the payment in their rent were asked how much

<sup>...</sup> Not sufficient data to compute response error measures.

<sup>&</sup>lt;sup>1</sup>Shown for 2 categories in 1990 and 3 categories in 1980.

<sup>&</sup>lt;sup>2</sup>Does not include "Don't know" category.

of the monthly rent was paid by the government. The amounts reported ranged from \$46 to \$760 with the average amount being \$309.

In the CRS, renters were also asked if someone living outside their house/apartment, other than the government, paid part of their rent. About 2.2 percent of those reporting rent, 55 householders, said someone else paid part of their rent. Eighty-eight percent said they included that amount in the rent they reported in the CRS. The remaining 12 percent said they did not include the amount in their reported rent. Those who did not include the payment in their rent were asked how much of the monthly rent was paid by someone outside the household other than the government. The reported amounts ranged from \$110 to \$425 with the average being \$265.

For all householders in the CRS who indicated that they did not include the additional payments, the payments were added to their reported contract rent. New rent tables were created using these data and are shown in appendix E. Table E.2 shows the response error measures based on the new data shown in table E.3. These data indicate that contract rent is still reported with moderate inconsistency (L-fold = 35.0), even after the additional payments are included.

Households that rent their units for cash rent were asked "Does the monthly rent include any meals?" to help identify congregate housing. This item was asked for the first time in the 1990 census. There were not enough housing units responding positively to this question to allow response error measures to be precisely computed.

Five households reported in the reinterview that their monthly rent included meals. Only two of these households had given that same response in the census. Of these five households, three reported that their rent included one meal, one said it included two meals, and one household reported having monthly rent include three or more meals per day.

Out of 2,463 households reporting in the CRS, one-half of 1 percent reported that their monthly rent included the availability of a professional medical person (doctor, nurse, physical therapist, etc.) on the premises. Another one-half of 1 percent of those reporting on this item in the reinterview said the monthly rent included convalescent facilities on the premises. One percent said their monthly rent included transportation for shopping or recreational needs.

#### Year Built

(Census H17, Reinterview H7)

As noted in [19], analysis of the 1980 census data showed that in many communities the number of housing units built in 1939 or earlier was underreported. To resolve some of this problem, particularly for renters, the 1990 census included a "Don't Know" category. The conjecture was that respondents who did not know the year the unit/ structure was built would answer "Don't Know" rather than guess the year built incorrectly and that the majority of the "Don't know" responses would actually have been built in 1939 or earlier. Subsequent computer processing could assign (allocate) a year built response that was, on average, more accurate.

The main objectives of the CRS for the year built item were to compare the year built distribution of the computer allocated values for the "Don't Know" responses to the census question versus the CRS responses and to determine the effect of the allocation procedure on the overall quality of the census year built data. The CRS, therefore, included a year built question without a "Don't Know" category. This analysis has been included under the response bias section since the evaluation focuses on the effect of the computer allocation procedure on the year built distribution.

Table 3.6 shows the year built distribution using the allocated values versus the CRS responses for the census "Don't Know" responses. The net difference rates and their 90-percent confidence intervals are also shown.

These data indicate that the computer allocation procedure tended to assign the "1939 or earlier" category at a substantially lower rate (29.5) than that indicated by the

Table 3.6. Year Built Distribution: Allocated Values Versus CRS Response for Census "Don't Know" Responses

	All units				Owner occupied				Renter occupied			
Year built	Perce cla		Net		Perce cla		Net		Perce cla		Net	
	Census (allo- cated)	CRS	differ- ence rate	90-percent confidence interval	Census (allo- cated)	CRS	differ- ence rate	90-percent confidence interval	Census (allo- cated)	CRS	differ- ence rate	90-percent confidence interval
1989 or 1990	0.4 4.8 6.5 19.3 13.3 14.3 11.9 29.5	1.0 2.4 4.7 15.8 12.7 13.6 10.7 39.1	*-0.6 *2.4 *1.7 *3.5 0.6 0.7 1.3 *-9.6	-1.2 to -0.1 1.3 to 3.6 0.3 to 3.2 1.2 to 5.8 -1.5 to 2.6 -1.5 to 2.9 -0.8 to 3.3 -12.1 to -7.0	0.6 3.1 5.2 15.3 10.4 14.5 11.8 39.2	0.8 1.2 2.1 9.5 10.8 11.6 10.8 53.3	-0.2 *1.9 *3.1 *5.8 -0.4 2.9 1.0 *-14.1	-1.1 to 0.7 0.4 to 3.4 1.2 to 5.0 2.8 to 8.8 -3.2 to 2.4 -0.4 to 6.2 -2.2 to 4.2 -18.4 to -9.8	0.3 5.9 7.5 22.2 15.4 14.7 11.5 22.4	1.3 3.3 6.9 20.2 14.3 15.0 10.9 28.0	*-1.0 *2.7 0.6 2.0 1.1 -0.3 0.6 *-5.7	-1.8 to -0.2 0.9 to 4.5 -1.6 to 2.7 -1.4 to 5.3 -1.9 to 4.2 -3.3 to 2.7 -2.1 to 3.2 -8.9 to -2.4

<sup>\*</sup> Indicates significance at the 10 percent level.

CRS responses (39.1) and to allocate units in the 1970 or earlier categories at a higher rate (except for the "1989 or 1990" category) than indicated by the CRS responses. This was true of both owner and renter occupied units.

Table 3.7 shows the indexes of inconsistency for those units providing a year built response in the census other than "Don't Know." Overall, the responses excluding "Don't Know" are in the moderately inconsistent range, (L-fold = 27.6).

Table 3.8 shows the Census and CRS year built distributions and net difference rates for all units, both those where a response was obtained in the census and the allocated values for the "Don't Know" responses. This table also includes the individual category indexes of inconsistency and the L-fold index of inconsistency.

In general, it appears that compared to the CRS distribution, the "1939 or earlier" category in the census is biased downward, while the "1940 to 1949" and "1950 to 1959" categories are biased upward. Also, the L-fold index increased to 36.7 as a result of the allocation of the "Don't Know" responses. The indexes for the individual categories all increased as well. Similar results are apparent for both owner and renter occupied units (tables E.4 and E.5 in appendix E). It must be emphasized that these data cannot be used to evaluate the accuracy of year built data in the sense that the CRS data provide, on average, more accurate responses. Rather, the data in table 3.8 reflect a comparison of the year distributions using two different questions. One question included a "Don't Know" category (census) and one did not include that category (CRS).

Table 3.7. Indexes of Inconsistency Excluding Census Responses of "Don't Know": All Units

Year built	Index of inconsistency	90-percent confidence level
1989 or 1990 1985 to 1988 1980 to 1984 1970 to 1979 1960 to 1969 1950 to 1959 1940 to 1949 1939 or earlier	42.4 21.2 33.0 22.7 32.2 32.2 42.2 17.1 27.6	36.0 to 50.0 19.2 to 23.4 30.5 to 35.7 21.3 to 24.3 30.3 to 34.3 30.2 to 34.4 39.2 to 45.5 15.7 to 18.5
L-fold index	21.0	26.7 to 28.6

#### **Plumbing Facilities**

(Census H10, Reinterview H6a, H6b, H6c)

In previous censuses, questions have been asked about source of water, flush toilet, and bathtub or shower. All of these items relate to the quality and value of housing. The 1990 census had one question on the sample questionnaire asking about COMPLETE plumbing facilities. Complete plumbing facilities consist of 1) hot and cold piped water, 2) a flush toilet, and 3) a bathtub or shower. The 1990 question was worded to elicit a "Yes" and "No" type response for the whole item. In the reinterview, inquiry into each of the components was made separately. A comparison of the CRS data collapsed to compare it to the "Yes" and "No" categories of the census indicates no bias in the distribution, but the data are somewhat inconsistent (L-fold index = 53.8 from table 2, page 34).

The lack of consistency in reporting for this item is not so much due to reporting problems in the category "Yes, have all three facilities," as it is in the lack of consistency of reporting in the category, "No." Over 99 percent of the households reporting "Yes" in the census also did so in the reinterview. However, only 44 percent of those answering "No" in the census reported the same in the reinterview (table C.5).

The majority of households (68 percent) who said they had complete plumbing facilities in the census, but reported less than complete facilities in the reinterview, had two of the three necessary facilities when the items were asked individually in the CRS.

The 1980 question, a 100-percent item, asked about the presence of some but not all plumbing facilities. In 1980, the respondent was asked to indicate whether the facilities were used exclusively by household members or were used by another household.

The index of inconsistency in 1990 was not significantly different from that in 1980. Caution should be used in making this comparison because the plumbing item had four response categories in the 1980 census and only two in 1990. The 1990 data appear to be an improvement over 1980 when one of the four categories, "Yes, but also used by another household," showed a large upward bias. There is no evidence of bias in the 1990 data.

Table 3.8. Indexes of Inconsistency and Net Difference Rates for Year Built Including Allocated Census Values

	Percent	in class	Net differ	ence rate	Index of inconsistency		
Year built	Census <sup>1</sup>	CRS	Estimate	90-percent confidence level	Estimate	90-percent confidence level	
1989 or 1990. 1985 to 1988. 1980 to 1984. 1970 to 1979. 1960 to 1969. 1950 to 1959. 1940 to 1949. 1939 or earlier.	1.1 8.2 8.7 22.6 15.9 15.1 8.9 19.4	1.5 8.3 8.4 22.7 15.7 14.2 8.3 20.8	*-0.4 -0.1 0.3 -0.2 0.2 *0.9 *0.7 *-1.3	-0.6 to -0.2 -0.4 to 0.3 -0.2 to 0.7 -0.7 to 0.4 -0.4 to 0.8 0.3 to 1.4 0.2 to 1.2 -1.9 to -0.8	52.3 27.3 39.1 31.5 40.7 41.6 53.3 29.1	45.2 to 60.7 25.1 to 29.7 36.5 to 42.0 30.0 to 33.0 38.8 to 42.8 39.6 to 43.8 50.3 to 56.6 27.5 to 30.7 35.8 to 37.7	

<sup>\*</sup> Indicates significance at the 10-percent level.

<sup>&</sup>lt;sup>1</sup>Final edited/ allocated census values.

# CHAPTER 4. Evaluation of Responses for Selected Population Characteristics

#### INTRODUCTION

The population questions evaluated by the Content Reinterview Survey (CRS) are:

Hispanic origin
School enrollment
Year of entry
Employment—industry
Place of birth
Military service
Citizenship
Race
Ancestry
Language usage
Industry and occupation—class of worker
Educational attainment
Work experience in 1989
Disability

Hispanic origin and race were collected on a 100-percent basis in the census. All others were asked of a sample of respondents. The first four of these characteristics above received a response variance type reinterview. The remaining items received a response bias type reinterview.

Data comparison tables for each item are presented at the U.S. level in appendix D. Response error measures for all items are presented in table 3 (response variance items) on page 36, and table 4 (response bias items) on page 38, at the U.S. level. Summary measures for the population characteristics by subgroup are also given in these tables. Table E-6, in appendix E, shows which questions were used to determine the subgroups. Facsimiles of the questions asked in both the census and the reinterview are shown in appendix A. The census and the reinterview item numbers from the questionnaire are listed in parentheses following the item name in this chapter.

### RESULTS FOR POPULATION CHARACTERISTICS WITH RESPONSE VARIANCE TYPE REINTERVIEWS

Several population items were repeated in the CRS just as they were asked in the census:

Hispanic origin
School enrollment
Year of entry
Employment—industry

These response variance type reinterviews produced indices in the low range for data on Hispanic origin and school enrollment. More moderate inconsistency was found between the two data sources for the information on year of entry and employment industry (table 4.1).

#### **Hispanic Origin**

(Census 7, Reinterview 7a, 7b)

A question on Spanish/ Hispanic origin was first asked in the 1970 census. It was asked of a 5-percent sample of the households. In the 1970 reinterview, a more detailed set of probing questions, a response bias type of reinterview, was conducted. The estimated proportion of persons reporting Hispanic origin in the 1970 census, 3.7 percent, was slightly less than the corresponding proportion in the reinterview, 4.0 percent. This bias was found to be significant at the 95-percent level of confidence.

Hispanic origin data, which received a response variance type reinterview in the 1980 CRS, exhibited a low level of response variability (L-fold = 13, table 4.1).

The Hispanic origin question was asked of everyone in the 1990 census; that is, it was a 100-percent item. For 1990, as noted in [15]<sup>1</sup>, a space was added in this item for persons of "Other Spanish/Hispanic" origin to specify their background. Examples of "Other Spanish/ Hispanic" origin groups were also added. This inquiry was reworded and instructions were expanded.

In the 1990 reinterview, the Hispanic origin question received a response variance type treatment; that is, the same basic question was asked as was asked in the census. The data from the 1990 CRS for Hispanic origin

Table 4.1. L-Fold Index of Inconsistency—Response Variance Type Reinterviews

		1990	1980		
Reinterview characteristic	L-fold index of inconsis- tency	90-percent confidence interval	L-fold index of inconsis- tency	90-percent confidence interval	
Hispanic origin	12.2	11.2 to 13.2	13.0	11.3 to 14.2	
School enrollment	17.3	16.6 to 18.0	-		
Year of entry <sup>1</sup>	23.0	21.1 to 25.2	13.0	11.2 to 15.8	
Employment— industry	32.6	31.6 to 33.7	-		

<sup>-</sup> Not applicable.

<sup>&</sup>lt;sup>1</sup>Numbers in brackets [ ] refer to entries in the bibliography section.

<sup>&</sup>lt;sup>1</sup> Shown for 10 categories in 1990 and 6 categories in 1980.

exhibited low levels of response variability. Four of the five response categories showed very low levels of inconsistency. Only the category "Yes, other Hispanic" displayed moderately high inconsistency.

Those people who reported "No, not Hispanic" in the census and then reported "Yes, other Hispanic" in the CRS contributed to this variability. In looking at the write-in responses for these people, almost one-third did not provide a write-in response. Of those who did provide a write-in response after indicating they were "Other Hispanic", almost 96 percent reported an actual Spanish/ Hispanic group indicating they truly are of Hispanic descent. Why they would report "Not Hispanic" in the census is unexplained. On the other side, for those reporting "Yes, other Spanish/Hispanic" in the census, then saying "No, not Spanish/Hispanic" in the reinterview, of those who provided a write-in entry, 73 percent listed a Spanish/ Hispanic group and 27 percent gave a group that was not Spanish/ Hispanic. Again, there seems to be no plausible explanation for this reporting inconsistency.

These results are almost identical to those obtained from the 1980 Content Reinterview. This suggests that the reporting problems have not changed over the decade.

In the past, there has been some concern about nonresponse rates to the Hispanic origin question. The allocated response in the census, for those who did not respond to the item, was compared to the response reported in the CRS. There are 792 persons for whom this comparison can be made for Hispanic origin. Table 4.2 shows this cross-classification.

These results suggest that the allocation procedure is fairly accurate, especially at the No/Yes level. The collapsed No/Yes cross-classification is given in table 4.3.

At the No/Yes level, it cannot be concluded that the census and the CRS distributions are different.

Table 4.2. CRS Versus Allocated Census Data for Hispanic Origin

Reinterview	Census classification (allocated)						
classification	Allo- cated-	No	Mex- ican	Puerto Rican	Cuban	Other	
Reported	792	745	13	3	1	30	
No (not Hispanic) .	742	730	4	3	1	4	
Mexican	22	8	6	0	0	8	
Puerto Rican	2	2	0	0	0	0	
Cuban	2	1	0	0	0	1	
Other	24	4	3	0	0	17	

Table 4.3. CRS Versus Allocated Census Data for Hispanic Origin

Reinterview	Census classification (allocated)			
classification	Allocated	No	Yes	
Reported	792 742 50	<b>745</b> <b>730</b> 15	47 12 35	

#### School Enrollment

(Census 11, Reinterview 10)

School enrollment, whether a person has attended school or college, public or private, just prior to the census, was consistently reported. Prior reinterview data is not available on this item. Collapsing these data to a "Yes" and "No" distribution yields consistently reported data. There is some inconsistency between the reporting of public versus private education.

There is an indication of bias in the "No/Yes" distribution. "No, has not attended since February 1" is overstated in the census. The combined "Yes" categories are understated in the census. However, since these data were collected in a response variance type reinterview, it is unclear whether this is reporting bias or whether there may be some other reason. For example, the difference in the timing of the census and the CRS interviews could be a cause.

#### Year of Entry

(Census 10, Reinterview 9c)

Year of entry, asking when those born outside the United States came to the United States to stay, shows response variability in the moderate range. The L-fold index of inconsistency is 23. Year of entry for 1980-81 was the only response category for which the difference in the census and CRS distributions was statistically significant.

The same question was asked in 1980 and was reported with low response variability (L-fold = 13, table 4.1). Since there were only 6 possible response categories in 1980 and the 1990 item had 10 response choices, the increase in the level of response variance is likely attributable to the difference in the number and width (in years) of the response categories.

#### **Employment—Industry**

(Census 28c, Reinterview 35c)

The question on industry sector serves as a tool for obtaining accurate industry codes for the three most difficult industry groups (manufacturing, wholesale trade, and retail trade) when the entries to the kind of business or company name items are missing or incomplete.<sup>2</sup>

These data are reported with moderate inconsistency (I = 32.6 from table 3) between the census and the reinterview. The "Wholesale trade" category is highly inconsistent indicating respondents have a problem reporting these data. There is no measurable difference in the inconsistency of these data by sex or by race from the total distribution.

<sup>&</sup>lt;sup>2</sup>[13]

### RESULTS FOR POPULATION CHARACTERISTICS WITH RESPONSE BIAS TYPE REINTERVIEWS

Many population items were asked in the CRS using a probing sequence of questions aimed at making the census question more clear or gathering more supporting data for responses given. With these data it is then possible to measure response bias using the net difference rate. Population items reinterviewed for response bias were:

Place of birth
Military service
Citizenship
Race
Ancestry
Language usage
Industry and occupation—class of worker
Educational attainment
Work experience in 1989
Disability

The first four items were reported with low levels of inconsistency between the two sources (table 4.4). The remaining items had indexes of inconsistency in the more moderate range. One disability item on self-care limitations was highly inconsistent.

Some of the items were asked in the 1980 Content Reinterview. For each of these items the L-fold index of inconsistency between the two decades was comparable (table 4.4). The question on citizenship was also asked in the 1970 Reinterview with very similar results.

Table 4.4. L-Fold Indexes of Inconsistency— Response Bias Type Reinterviews

		1990		1980
Characteristic	L-fold index of incon- sis- tency	90-percent confidence interval	L-fold index of incon- sis- tency	90-percent confidence interval
Place of birth	4.9 8.5 10.9	4.6 to 5.2 7.9 to 9.2 10.0 to 12.0	6.0 - 73.0 <sup>1</sup> 13.0	6.2 to 6.8 - 70.9 to 74.9 112.0 to 14.8
Race	16.3 26.5 26.9	15.5 to 17.1 25.6 to 27.4 25.6 to 28.3	26.0 25.0	25.4 to 26.9 23.2 to 26.5
tion	27.5 32.3	26.5 to 28.5 31.7 to 32.9	- 35.0	30.8 to 39.0
1989	45.9 43.0 45.7 47.1 73.6	44.6 to 47.3 40.9 to 45.1 42.4 to 49.3 44.2 to 50.2 69.5 to 78.0	- - - -	- - - -

<sup>-</sup> Not applicable.

#### Place of Birth

(Census 8, Reinterview 8a, 8b, 8c)

As explained in [16], in the censuses of 1960, 1970, and 1980, place of birth was asked on the basis of the place of residence of the mother. Reinterview studies following the 1980 census revealed a strong tendency for respondents to report the actual state of occurrence of birth, even when instructed to report the mother's residence. In the 1990 census, the instruction to respond in terms of the mother's place of residence was deleted and the question simply read "In what U.S. State or foreign country was this person born?"

The data from the CRS questions which included an instruction "if born in a hospital, give location of hospital" indicate the census distribution across the 50 States and the District of Columbia, Puerto Rico, the outlying areas, Canada and Mexico are virtually identical. There is, overall, little inconsistency in the responses. The L-fold index of inconsistency is approximately 5 (table 4 and table 4.4). Thus, it appears the census responses accurately reflect the actual State or foreign country of birth. It should be noted that there was some evidence of clerical coding errors in the place of birth data in 1980. Automated coding was used in 1990. It is believed that eliminating this component of error contributed to the consistency of the data.

#### **Military Service**

(Census 17a, 17b, 17c, Reinterview 25a, 25b, 25c, 25d, 25e, 26)

The two 1980 questions on military service were revised for the 1990 census, and one additional question was included on the questionnaire. In both censuses, the items were carried on the sample questionnaires. The data on military service and veterans were expanded by the addition of a third veteran question to the 1990 census, total number of years of active-duty military service. This item, to be used with those on veteran status and period of service, was added to bring the census system of collecting veteran data into close conformity with the Department of Veterans Affairs (VA) system and to produce statistics more closely approximating the changing program needs and populations of the VA. In addition, the VA uses census data as baseline figures in preparing its estimates of the number of veterans for intercensal years by county.<sup>3</sup>

The first of the three military service questions was on veteran status (census question 17a, appendix A). The census asked all those age 15 and over about active-duty military service in only one question. The item was separated into parts in the reinterview. These separate reinterview questions ask individually about active-duty military service, military-related civilian service for females, and service in the military reserves or the National Guard. The reinterview inquiries were recoded and matched to the

<sup>&</sup>lt;sup>1</sup> Edited data.

<sup>&</sup>lt;sup>2</sup>20 categories in 1980, 36 categories in 1990.

<sup>&</sup>lt;sup>3</sup>[12]

census question. The data between the census and the reinterview recode were very consistently reported (Index = 8.5, table 4). While males report these data very consistently, the same data for females are reported with moderate inconsistency (table 4).

For the whole distribution, there is substantial bias in the category "Yes, now on active duty" which is overreported in the census (table 4). Further analysis revealed that persons contributing to this situation have been in the military service and gave dates in the reinterview ranging between 1943 and 1988 for their ending date for their most recent period of service. This indicates there is some error in the census. Not surprisingly, there is a moderate amount of bias in the category "Yes, on active duty in past, but not now," as it was underreported in the census. These same people contributed to this situation (table 4). This overreporting of the "Yes, now on active duty" category has been recognized by the Census Bureau. In the edit program, additional information from the census questionnaire is used to move these respondents to their proper category. As shown in table E.9, while the unedited data had bias in the first two categories, there is no bias at all in the edited data. This indicates that the census edits correct the bias and that the edited data should be used for this item (table E.10).

The second military service question was about the period of active-duty military service. It was asked of everyone who reported active duty, either currently or in the past. In the census, a respondent could select as many specific periods in which he/ she had served. On average, each respondent selected two periods of service. In the reinterview, the respondent was asked for specific dates of active-duty military service. These dates were later recoded to the same periods as the census. Comparisons were made for each of the eight categories. These comparisons (tables D.17 through D.24) are limited to veterans (those who reported active-duty military service in the past).

All periods of wartime service are reported very consistently (table 4). World War I service is excluded because there was insufficient data to calculate response error measures. Periods of service in peacetime are reported with moderate inconsistency between the census and the reinterview recodes. The one exception is service in the most recent period, "September 1980 or later," which was reported with low inconsistency. The final category, "Any other time," is reported very inconsistently between the two sources indicating a reporting problem with this category.

Each of the seven categories (World War I was excluded from the analysis) shows some bias in the census distribution. As shown in table 4.5, there is evidence that the census understates the "Yes" category for all service periods. This is based on the reporting of actual dates of service (month, day, and year) in the reinterview. The peacetime periods appear to be subject to relatively large reporting bias.

Table 4.5. Military Service

Active duty was served		ent in class	Net differ-	90-percent confidence interval	
	Census	CRS	ence rate		
September 1980 or later	6.0	7.6	* – 1.6	−2.1 to −1.0	
May 1975 to August 1980 .	7.1	10.7	<b>*</b> -3.6	-4.3 to -2.9	
Vietnam era	32.1	34.1	<b>*</b> -2.0	−2.6 to −1.3	
February 1955 to July 1964	17.0	28.9	<b>* –</b> 11.9	–13.2 to –10.6	
Korean conflict	20.1	21.3	<b>*</b> -1.2	−1.8 to −0.6	
During World War II	35.4	36.1	*-0.6	–1.1 to –0.2	
Any other time	1.3	9.9	* <i>-</i> 8.6	−9.7 to −7.4	

<sup>\*</sup> Indicates significance at the 10-percent level.

The third military service question, the new item, asked respondents who have current or past active-duty military service about their total number of years of active-duty military service. This was collected with an open-ended response in the census. In the reinterview the respondent was asked for specific dates of active-duty military service. These dates were later recoded to reflect the number of years of service. The numbers in the census and the recoded years of service from the reinterview were collapsed to five meaningful categories which are shown in table D-25b, appendix D. Even collapsed to five categories, there is moderate inconsistency between the census and reinterview in reporting the number of years of service (L-fold = 34.8, table 4). There is evidence that the two largest categories are underreported in the census while "3 to 10" years of service is overreported. There is no evidence of any difference between the distributions for the smallest numbers of years of service, "less than 2" and exactly "2" (table 4).

Looking at the full distribution of years reported, table D25a, most of the differences were within one year. It was thought that the difference might reflect a tendency for persons to round up when answering the open-ended census question. However, a closer look at the data showed that about half of the time this was true and the other half of the time, the opposite was true.

#### Citizenship

(Census 9, Reinterview 9a, 9b)

In 1980, citizenship was asked of foreign-born persons only. However, many people born in the United States erroneously answered the question, making for very inconsistent data since there were no appropriate categories for them to choose. When the data were edited and these native-born people were removed, the remaining data for foreign-born persons were reported quite accurately (table 4.4).

For 1990, the universe for the citizenship question was revised to include all persons rather than only the foreign born. As shown in table 4, these data are reported consistently. The L-fold index of inconsistency is about 11. The overall consistency of reporting is about the same by

sex and race. Hispanic origin persons report slightly more inconsistenly than non-Hispanic persons. In general, the distribution of the persons across the five categories are about the same in the census and CRS. Although the net difference rates shown in table 4 do suggest a slight overreporting of the "Yes, U.S. citizen by naturalization" category, this may be a problem with the CRS data.

#### Race

(Census 4, Reinterview 5a, 5b)

The race question is asked of all persons in the census. The concept of race as used by the Census Bureau reflects self-identification by respondents; it does not denote any clear-cut scientific definition of biological stock. The data represent self-classification by people according to the race with which they identify themselves.<sup>4</sup>

The 1980 census race item underwent a number of modifications for the 1990 census. A response category for "Other API" (Asian or Pacific Islander) was added along with a space for respondents to write in their "Other API" subgroup. In addition, the spanner "Asian or Pacific Islander (API)" was placed over the API response categories. New instructions were added and others expanded, and the term "Race" was used as a label.<sup>5</sup>

Race was not evaluated in the 1970 nor the 1980 CRS. In the 1990 Reinterview, race was obtained using somewhat more detailed questions. Additional categories were added to the list of Asian or Pacific Islander groups. "Other API" and "Other race" persons could list more than one group, but, if they gave multiple responses, they were asked with which group they most closely identified. For American Indians, additional inquiries were made regarding their enrolled or principal tribal affiliation.

For initial analysis, the race data were collapsed into the six major categories shown in table 4.6. Similar data are shown in table D-6, appendix D for the 16-category race item.

As table 4.7 shows, "White" is underreported in the census (from 0.3 to 0.7 percentage points) while "Other" race is overreported (from 0.4 to 0.7 percentage points). See also table 4, item P4.

Table 4.6 shows that 349 persons reported "Other race" in the census and "White" in the CRS, while 229 persons reported "Other race" in the CRS and "White" in the census. The "Other race" category was collected as a write-in entry in both the census and CRS. Analysis of these write-in entries indicates that the majority of persons in these two inconsistent categories were of Hispanic origin. It is apparent that Hispanics have difficulty in classifying themselves into the race categories presented.

The data for race were analyzed for those who said they were Hispanic in the census and those who reported themselves as non-Hispanic. The non-Hispanics represent over 94 percent of the total population and the race data

⁴[15] ⁵[15]

Table 4.6. Census Question P4—What Is Your Race?—Unedited Data: 1990 Census

	Census classification							
Reinterview classification	Total re- ported	1	2	3	4	5	6	
Total reported	24,539	20,919	2,375	118	454	81	592	
Item responses								
1. White	21,034	20,564	30	43	12	36	349	
2. Black or Negro	2,406	59	2,306	2	2	3	34	
<ol> <li>Indian/ Eskimo/ Aleut</li> <li>Asian or Pacific</li> </ol>	116	37	5	69	0	0	5 4.	
Islander	449	24	0	0	410	6	9	
5. Other API	80	6	7	0	21	14	32	
6. Other race	454	229	27	4	9	22	163	

Table 4.7. Response Error Measures for Race

Race categories	Net dif- ference rate	Index of inconsistency	90-percent confidence interval
White	* -0.5 -0.1 0.0 0.0 0.0 * 0.6	13.5 3.9 41.2 9.4 82.9 70.3 15.9	12.8 to -14.3 3.5 to 4.4 34.9 to 48.7 7.8 to 11.2 71.9 to 95.6 66.1 to 74.8 15.1 to 16.8

<sup>\*</sup> Indicates significance at the 10-percent level.

for the non-Hispanics contained no measurable bias. Remember that the race data for all people showed significant bias in the categories "White" and "Other Race." Looking at the same race data for just Hispanics, table 4.8, there is significant bias in all categories except API's. This suggests that the Hispanic population are contributing most of the bias in the race data in the census.

If the race item was not answered by someone in the census, the person's race was allocated. The allocated census response was compared to the response reported in the CRS. There are 371 persons for whom this comparison can be made for race. Table 4.9 shows this cross-classification.

About two-thirds of the allocated responses are consistent with the CRS responses. There does, however, seem to be a tendency to allocate "Other race" proportionately

Table 4.8. Net Difference Race for Race

Race classification	Non- Hispanic	Hispanic	Total population
White	0.1	<b>*</b> -10.4	*-0.5
Black	0.1	<b>*</b> –3.5	-0.1
Indian/ Eskimo/ Aleut	0.0	* 0.7	0.0
Asian or Pacific Islander	-0.1	-0.4	0.0
Other API	0.0	<b>*</b> 2.4	0.0
Other race	-0.1	* 11.2	* 0.6

<sup>\*</sup> Indicates significance at the 10-percent level.

Table 4.9. Allocated Census Data for Race

Deintemierr	Census classification (allocated)						
Reinterview classification	Total allocated	1	2	3	4	5	
Total reported	371	187	39	4	15	126	
1. White	262	167	6	2	6	81	
2. Black or Negro	34	1	27	0	1	5	
3. Indian/ Eskimo/ Aleut	5	1	0	2	0	2	
<ol> <li>Asian or Pacific</li> </ol>							
Islander	9	1	0	0	5	3	
5. Other	61	17	6	0	3	35	

more in the census than is consistent with the CRS responses; that is, 126 cases in the census versus 61 in the CRS.

#### **Ancestry**

(Census 13, Reinterview 14a, 14b, 15a, 15b, 16, 17)

As stated in [15], this item, asked of a sample of persons, is based on self-identification and is open-ended (respondents write in their answers). Ancestry refers to a person's ethnic origin or descent, "roots," or heritage. Ancestry also may refer to the country of birth of the person or the person's parents or ancestors before their arrival in the United States. Persons can report their ancestry regardless of the number of generations removed from their ancestors' places of origin. Furthermore, responses to the ancestry question reflect the ethnic group(s) with which persons identify and not necessarily the degree of attachment persons have with the particular group(s).

According to the instruction guide accompanying the census questionnaire, persons who have more than one origin and cannot identify with a single ancestry group may report two ancestry groups (for example, German-Irish). Instructions also specify that a religious group should not be reported as a person's ancestry. Ancestry (ethnicity)

and race are viewed as separate concepts by the Census Bureau; therefore, persons reporting a particular ancestry may be of any race.<sup>6</sup>

These data are difficult to analyze because both the census and the CRS allowed multiple responses. For initial analysis, the data for all respondents who provided a single ancestry in the census and a single ancestry in the reinterview were compared. Their responses were collapsed to the 36 categories usually used in census publications and are shown in table D-10, appendix D.These data for single responses are reported with moderate inconsistency (L-fold index = 26.5). Native born persons also report with moderate inconsistency (L-fold index = 29.0). Foreign born people, however, report very consistently in this situation (L-fold index = 7.5, table 4).

Data are shown in tables D-11 and D-12 for the first ancestry reported in both the census and the reinterview. Table D-11 shows the 36 categories usually used in census publications while table D-12 is collapsed to the 34 largest ancestry groups reported in the census.

Table 4.10 examines additional data on the consistency with which persons report ancestry in the census and CRS for both single and multiple responses. The consistency of reporting is shown for those persons reporting a single ancestry both times, those reporting two in the census and one in the CRS and vice- versa, and those reporting multiple ancestries in the census and CRS. Data is shown first for total persons, then separately for the native born and the foreign born. Overall, at least one census response matches one CRS response for 75 percent of all persons. The corresponding figure for foreign born persons (79 percent) is slightly higher than that for native born persons (75 perent). The difference between native and foreign born persons is somewhat larger when ony a single response is given (67 versus 79 percent).

<sup>6</sup>[15]

Table 4.10. **Persons Reporting Ancestry** 

		Total pe	Total persons Native born		Foreign born		
CRS response	Census response	Number matched	Percent matched	Number matched	Percent matched	Number matched	Percent matched
Single	Single	7,515	<sup>2</sup> 68	6,667	<sup>2</sup> 67	848	<sup>2</sup> 79
Single	Two	1,277	<sup>3</sup> 65	1,265	<sup>3</sup> 65	12	<sup>3</sup> 83
Multiple <sup>1</sup>	Single	2,453	<sup>4</sup> 64	2,380	<sup>4</sup> 64	73	477
Multiple <sup>1</sup>	Two	3,952	594	3,934	594	18	5100
		3,952	<sup>6</sup> 55	3,934	<sup>6</sup> 55	18	<sup>6</sup> 78
Total		15,197	<sup>7</sup> 75	14,246	<sup>7</sup> 75	951	<sup>7</sup> 79

<sup>&</sup>lt;sup>1</sup>CRS could have up to three responses.

<sup>&</sup>lt;sup>2</sup>Single response matches.

<sup>&</sup>lt;sup>3</sup>Single CRS response matches one of two census responses.

<sup>&</sup>lt;sup>4</sup>Single census response matches one of CRS multiple responses.

<sup>&</sup>lt;sup>5</sup>One of census responses matches one of CRS responses.

<sup>&</sup>lt;sup>6</sup>Both of the census responses match to two of the CRS responses.

<sup>&</sup>lt;sup>7</sup>At least one census response matches one CRS response.

#### Language Usage

(Census 15a, 15b, 15c, Reinterview 18, 19, 20, 21, 22, 23, 24)

As explained in [16], data from the language question are used to identify areas with large numbers of persons with limited English-speaking ability as well as concentrations of speakers of a particular non-English language. A three part question, similar to that used in the 1980 census, was asked in the 1990 census.

Analysis of the CRS data indicate that for the first part of the question, "Does this person speak a language other than English at home?", the census data are only moderately inconsistent. Table 4.11 shows that, for all persons, the L-fold index of inconsistency is about 27. This level is comparable to that observed in the 1980 CRS. Analysis of the consistency of responses to this part of the question by origin, shows that persons reported as Hispanic origin in the census were somewhat more consistent in their reporting than non-Hispanics, (27.9 versus 39.2).

Among persons categorized as "No" in the census and "Yes" in the CRS to this part of the question, the CRS data indicate that virtually all these persons reported that they learned to speak the language reported in the CRS either at home or in school and that they now speak the language at home. However, virtually all of these persons also said in the CRS that they spoke this language at home "Less often than English" or "Almost never speak" the language.

Conversely, among persons categorized as "Yes" in the census and "No" in the CRS, the CRS data indicate that almost half of the persons older than 15 indicated that a language other than English was spoken in their home as a child, even though they reported that they themselves did not speak the language. The reason they were in the "Yes" category in the census is unknown.

These patterns of response (no/ yes, yes/ no) occurred about equally in the census/ CRS comparison and illustrate that the responses to this question are apparently subject to various interpretations by respondents.

Answers to the question "What is this language?" (for those who responded "Yes" to the first part of the question in the census and CRS) is very consistently reported (L-fold index = 5.2). Almost half the respondents indicated the language spoken was Spanish (table D-15).

The CRS data for the last part of the question, "How well does this person speak English?", (also asked of those who responded "Yes" to the first part of the

Table 4.11. Indexes of Inconsistency: Speak a Language Other Than English at Home?

Speak a language other than English at home (yes or no)	Index of inconsis-tency	90-percent confidence interval
Total persons	27.9	25.6 to 28.3 24.5 to 31.7 37.1 to 41.4

question), indicate a high level of inconsistency in responses (L-fold index = 60.3) and a tendency to overreport the "Very well" and "Well" categories in the census as compared to the CRS (table 4). This tendency is present for both Hispanics and non-Hispanics.

The CRS provides some additional data on the inconsistent response patterns for this part of the question. Of particular interest are the persons who were categorized as "Very well" or "Well" in the census versus "Not well" or "Not at all" in the CRS. A very high proportion of these persons (83 percent) indicated in the CRS that they spoke the (other) language at home "All the time" or "More often than English." These data indicate that this part of the question is apparently subject to varying interpretations by respondents who report for themselves as well as for others in the household in the census.

#### Industry and Occupation—Class of Worker

(Census 30, Reinterview 35b, 35c, 35d)

Each person in the census who had worked anytime since 1985 was asked to describe their most recent job activity and to select their class of work. There was a slight change in this question from the 1980 version. The category "Employee of private company, business, or individual, for wages, salary, or commissions" was split into two categories in 1990: one for employees of private-for-profit employers and the other for employees of private not-for-profit employers.

Initially, census responses were compared to the reinterview responses for this item. The data were reported with moderate inconsistency. Three of the eight categories showed some difference in the percent in class (table 4). There was a small difference in the first category, "Employee of PRIVATE-FOR-PROFIT company or business or of an individual, for wages, salary, or commissions," which was overreported in the census. This was one of the new categories. Two other categories, "State government employees" and "SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm," were underreported in the census.

The class of worker responses given in the reinterview were recoded using additional information. The kind of business or industry (reinterview 35b, appendix A) and the employment sector (reinterview 35c, appendix A) were used in producing the recoded class of worker. This was compared to the census response, table D-30. Again, there was moderate inconsistency between the two data sources. However, there was a change in the bias pattern using the recoded data (table 4). There was still evidence of overreporting in the category "Employee of a PRIVATE-FOR-PROFIT company or business or of an individual, for wages, salary, or commissions" and underreporting in the "SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm." The difference comes in the category "State GOVERNMENT employee" which was highly underreported in the census but now shows no

bias after the recode. However, the category "Local GOV-ERNMENT employee" (city, county, etc.) shows evidence of being underreported in the census after the recodes are applied.

#### **Educational Attainment**

(Census 12, Reinterview 10, 11, 12, 13a, 13b, 13c)

The educational attainment question used in the 1990 census was quite different from that used in the 1980 census. The 1980 census version of the question consisted of two items: what was the highest grade the respondent had attended, and did the respondent complete the highest grade attended? For the 1990 census, major changes were made to the question to measure educational attainment. As explained in [17], first, one question was asked rather than two. Second, the question asked how much school the respondent had completed. Third, response choices were provided for degrees received, in addition to grades completed. Fourth, grade categories were collapsed at the elementary level. Response choices were provided for grades 1-4 and 5-8. Fifth, the response choice "Never attended school" was changed to "No school completed" and was placed at the beginning of the continuum, rather than at the end. The CRS included questions on highest grade attended, whether or not the highest grade attended was finished and a question on how much school was completed (including degree received).

The response error measures for the 17 response categories of the educational attainment question are provided in table 4. While the educational attainment data are collected using 17 categories, only 7 categories are used in many census publications and they are shown for persons 18 or years older in many cases. Table 4.12 provides the net difference rates for the seven publication level categories for the age group 18 years or older.

These data indicate that for the publication level categories, the census and CRS distributions are different to some extent. In particular, the "Elementary, 0-8 years," and "Associate degree" categories have relatively large net difference rates. Smaller, but significant, net difference rates are present for the all other categories but "Graduate degree."

Table 4.12. Net Difference Rates for Educational Attainment for Persons 18 and Over

Educational attainment	Percent	in Class	Net dif- ference	90-percent confidence
	Census	CRS	rate	interval
Elementary, 0 to 8 years High school, 1 to 4 years,	6.1	6.6	*-0.5	
no diploma	13.7	13.2	* 0.4	
High school diploma	33.4	34.8	<b>*</b> -1.4	–1.8 to –0.9
Some college, no degree	20.5	19.9	* 0.7	0.3 to 1.1
Associate degree	5.7	4.3	* 1.3	1.1 to 1.6
Bachelor degree Graduate degree	13.6 7.0	14.1 7.1	* -0.5 -0.2	-0.7 to -0.2 -0.3 to 0.0

<sup>\*</sup> Indicates significance at the 10-percent level.

Given the differences in the census and CRS questions and in particular the fact that the CRS interviews were conducted some months after census enumeration, it is reasonable to expect some response differences due to these factors. For example, persons enrolled in high school in April may have felt they completed the 12th grade and did not yet have a diploma, but by the time of the CRS interview, they had a diploma and reported it as such (even though the CRS questions use "As of April 1, 1990," as a reference period). Such factors could explain much of the Census/ CRS difference in this category. In addition, it was necessary to recode the CRS responses to the corresponding census categories since the same questions were not used in census and CRS. Some differences may have been introduced due to the recoding procedure.

Other differences, such as the large proportion of associate degree holders in census who reported "Some college, no degree" in the CRS, may be due to the respondent's inability to correctly categorize degree training below the bachelor's level.

#### Work Experience in 1989

Worked in 1989 (Census 31a, Reinterview 36, 37) Weeks worked in 1989 (Census 31b, Reinterview 38a)

Usual hours worked per week in 1989 (Census 31c, Reinterview 38b)

As noted in [11], these three items together constitute the battery of questions on work experience. The worked last year question screens persons who had worked during the previous year to answer the weeks worked and usual hours worked questions.

The census asked if the respondent worked in 1989, eliciting a simple "Yes" or "No" response. The reinterview asked generally this same question and the responses, compared to the census, were moderately inconsistent (L-fold = 45.9, table 4). In addition to asking about working in 1989, the reinterview probed as to whether the respondent had done any temporary, part-time, or seasonal work even for a few days during 1989. The reinterview responses were recoded taking the additional information into account, and compared to the census responses. There was a moderate amount of inconsistency between the two. More interesting is the bias that is shown to be present in the census when the data are compared to the reinterview recode which had a probe for temporary, part-time or seasonal work (tables E-7 and E-8 in appendix E). There is evidence that in the census the "Yes" category is underreported. In other words, the census understates the number of people who worked in 1989 (table 4). This same bias exists by sex and by race.

The item on weeks worked last year and the one on usual hours worked serve, among other uses, as qualifiers for the data from income and earnings questions. Since all income-related information in the census refers to the calendar year before the census is taken, the information

on weeks worked and usual hours worked per week in the previous year is necessary to estimate weekly and hourly earnings and to take into account differences in weeks and hours worked when analyzing income and earnings data for various subgroups of the population, such as by race or sex. These items also are used to assign or allocate responses to missing income and earnings questions.<sup>7</sup>

The number of weeks worked in 1989 is very inconsistently reported between the census and the reinterview (L-fold = 56.8), indicating repondents experience difficulty answering this item (table 4). The distribution of weeks worked is significantly different between the census and CRS for all categories. A possible explanation could be in the way vacation and sick leave are reported. The census includes a footnote on the question saying to include vacation, paid sick leave, and military service. Perhaps respondents missed this note. In the reinterview, the reference to including all this leave is read to the respondent as part of the question.

The usual number of hours worked was reported as a write-in number in both the census and the reinterview. For analysis purposes, the data were grouped into categories. Using three categories: "1 to 14 hours," "15 to 34 hours," and "35 hours or more," there was moderate inconsistency in reporting between the census and the reinterview. The percent of respondents in these categories between the two sources was the same (table 4). Collapsing to just two categories: "1 to 34 hours," and "35 hours or more," it is not surprising that the data are a little more consistent, although they are still in the moderately inconsistent range (also table 4).

#### **Work Disability**

(Census 18a, 18b, Reinterview 33a, 33b).

The 1990 census questions on disability covered three areas: work disability, mobility limitation, and self-care limitation. Persons 15 years or older are identified as having a work disability if they have a health condition that has lasted 6 months or more that limits or prevents them from working at a job. For the reinterview, the question was asked of persons ages 15 to 65. Table 4 provides the response error measures for the first part of this question (18a) asking whether the condition limits the amount or kind of work this person can do at a job. The index of inconsistency for this question is in the moderate range (I= 43). There is evidence of a fairly large difference in the Yes/ No distribution between the census and CRS, 8.3 percent versus 10.3 percent in the "Yes" category, respectively. These results are similar for both males and females.

In the census persons were also asked if they have a condition which *prevents* them from working at a job regardless of their response to the first part of the question. Table 4.13 provides data on the responses to both parts of this question in the census and CRS. These data

<sup>7</sup>[11]

Table 4.13. Distribution of Responses to Census Questions 18a and 18b and CRS Questions 33a and 33b on Disability

		Limits (18a)					
		Yes No					
			Prevent	s (18b)			Per-
CF	RS	Yes No Yes No				Total	cent
Limits <sup>1</sup> (33a)	Prevents (33b)						
Yes	Yes	535	85	11	209	840	5.6
	No	65	175	0	461	701	4.6
No	Total Percent	177 777 5.1	215 475 3.1	12 23 0.2	13,174 13,844 91.6	13,578 15,119 100.0	89.8 100.0

<sup>1</sup>In the CRS, persons responding "No" to 33a were not asked 33b. No skip pattern was included in the census question.

indicate that for the universe of persons who reported they had a limiting condition, in both the census and CRS their responses to the "prevents" part of the question were still moderately inconsistent. The index of inconsistency for this universe is about 41. The percent in class figures for this universe are 72.1 percent and 69.8 percent for the census and CRS, respectively. There is no evidence of a statistically significant difference in these figures.

There remain about 7 percent of the persons that are inconsistent based on the responses to both parts of this question (18a = No, 18b = No and 33b = Yes or No, or 18a = Yes and 33a = No). This level of inconsistency has been observed in other evaluations of these questions, particularly in specially designed content tests conducted prior to the 1980 and 1990 censuses to develop the disability questions.

#### **Mobility Limitations**

(Census 19a, Reinterview 34a)

This question also suffers from a moderately high level of inconsistency (I= 47.1), but there is no evidence that the census and CRS distributions differ. The level of inconsistency is about the same by sex and age (15-65 and 66 or more). There is no evidence of differences in the census and CRS distributions for these groups as well.

Table 4.14 examines additional data collected in the CRS for the persons whose census/ CRS responses to the mobility limitation question were inconsistent. The data in this table come from the CRS question concerning the need for an aid to help get around and the duration of use of such an aid.

The patterns of reporting to this question are remarkedly similar for both inconsistent response patterns to the mobility limitation question, (No/Yes) and Yes/No). These data seem to illustrate the rather subjective nature of responses to this question both among persons that require aids to get around, and those who do not.

JOBNAME: No Job Name PAGE: 10 SESS: 92 OUTPUT: Tue Sep 28 17:30:12 1993 /pssw02/disk2/90dec/cphe/1/chap4

Table 4.14. Additional CRS Data for Mobility Limitation Question: Inconsistent Response Patterns

			CRS q	uestion <sup>1</sup>		
Census/ CRS response to mobility limitation question	Number of	29 (need	9A ls aid)	29B (duration, 6 months or more)		
	persons	Yes	No	Yes	No	
Census (19A) = No CRS (34A) = Yes Census (19A) = Yes	336	85	251	72	13	
CRS (34A) = No	334	71	262	61	10	

<sup>&</sup>lt;sup>1</sup> See appendix A for the CRS questions.

The first time the census included questions on mobility limitations and self-care limitations was in 1990.

#### **Self Care Limitation**

(Census 19b, Reinterview 34b)

The level of inconsistency in this question is quite high (I= 73.6) and there is an indication of a substantial difference between the census and CRS distributions. The percent in class in the census is about twice that in the CRS (4.2 percent versus 2.1 percent) for positive responses. These same results are also found by sex and age. The difference for persons of age 66 or more, 19.2 percent versus 5.1 percent, is particularly troublesome as one might expect more consistent reporting for this group. It is difficult to explain the larger proportion of persons who reported a self-care limitation in the census. As noted by McNeil (1993), the 1990 question on mobility and self-care limitations are subject to the criticism that while they ask whether a condition makes an activity difficult, there is no mention of environmental factors that may also affect the response to these questions. Perhaps such factors are responsible for the difference.

# **CHAPTER 5.**Survey Design and Operations

#### SAMPLE SELECTION

The CRS is designed to measure response error associated with selected population and housing items. The objective is to measure census data quality using simple response variance and response bias associated with data items which are reinterviewed.

A single stage systematic sampling scheme was used for the CRS. To obtain a final sample of 12,800 occupied units, an initial sample of 15,500 housing units was selected from the census address file. This number of households is comparable to the designated sample sizes of the 1970 CRS and the 1980 CRS. The CRS sample was restricted to sample (long form) census households. Census households responding by mail and enumerator return households were reinterviewed.

When the CRS sample was selected from the Census Address Control File (ACF), enumeration had not yet taken place, so occupancy status of the units was not known. Units enumerated as vacant in the census were later excluded from the CRS. Also, housing units deleted from the ACF during enumeration were eliminated from the CRS sample. Original sample selection from the ACF yielded 15,417 housing units. 12,891 reinterview sample cases were sent to the field after elimination of vacants and deletes (nonexistent units, nonresidential units, and so forth).

### FIELD OPERATIONS AND CLERICAL PROCESSING

All initial reinterviews were conducted using Computer Assisted Telephone Interviewing (CATI) from September through December 1990. The results of the CRS are used as the standard by which the quality of census responses are measured; therefore, it is essential that the reinterview results are of the highest quality. Increased data quality is associated with the CATI system due to a reduction in interviewer bias. In the CATI interview, the computer controls skip patterns and the supervisor can monitor both the audio portion of the interview on the telephone and the video portion on a screen. Only experienced CATI interviewers were used to conduct the reinterviews.

For the 1990 CRS, introductory letters were mailed to the sample housing units prior to the start of the telephone interviews. Households were contacted by CATI until complete information for each person and the housing unit was obtained (or a specified number of failures to reach the sample unit occurred). Characteristics of each person age 15 and over were obtained by self-response, when possible. A proxy respondent was defined as any adult household member who was knowledgeable of the sampled person's characteristics. A proxy respondent could be used to obtain population data in the following situations:

- Three call contacts failed to obtain self-response for an individual.
- The sample person was mentally or physically incapable of responding.
- 3. The sample person was temporarily absent, hospitalized, in a nursing home, or institutionalized for the entire interview period.
- 4. The person was under 15 years of age.

Overall, 75 percent of the persons in the survey reporting data were reported by self-response. The remaining 25 percent of the data collected was obtained from proxy respondents. Nineteen percent of the population were under 15 years of age and required a proxy respondent. The other proxy respondents, 6 percent of the reporting population, were reporting for persons who could not be reached for self-response during the time period of the survey.

There were differences between the two modes of data collection, CATI and personal visit (PV), for self versus proxy response. CATI had a higher self-response rate, 76.7 percent versus 64.7 percent self-response for personal visit. See table 5-1.

Population data were not collected for any person who no longer lived at the sample unit (including college students, divorced spouses, and children who no longer resided at the sample address). For the housing data, the respondents included the householder, his or her spouse, or any adult household member in whose name the home was owned, being bought, or rented.

Table 5.1. Response Rates for Self-Response Versus Proxy

	CATI	PV	Total
Self	16,829	2,666	19,495
	(76.7)	(64.7)	(74.8)
Proxy	5,105	1,454	6,559
	(23.3)	(35.3)	(25.2)
Total	21,934	4,120	26,054
	(100.0)	(100.0)	(100.0)

For purposes of the CATI interview, the term "contact" designated a call which resulted in an actual contact with at least one of the adult persons listed on the census roster for the sampled housing unit. The following guidelines were issued for CRS:

- After four "no-contact dialings" at various time periods to the sampled household, Directory Assistance was called to verify the original number or obtain a new number.
- If Directory Assistance provided a new number, the new number was called seven times until a contact was made. After seven no-contact calls, the case was sent for personal visit followup.
- 3. If Directory Assistance did not provide a new number for any of the persons on the roster, CATI continued calling the original number three additional times (for a total of seven calls). After the seventh no-contact, the case was sent to field for personal visit followup.

Experienced current survey interviewers from the census regional offices were used to conduct the personal visit reinterviews. The census household roster and telephone number were obtained to aid the CATI interviewers and the field staff conducting personal visit interviews. This census household roster included the census person number which was extremely valuable in linking the census and reinterview data for identical persons. The reinterviews were conducted independently of the census enumeration. That is, the reinterviewer did not know how the sample household had answered the various questions on the census questionnaire, even though the reinterviewer

had the sample household roster. When there were differences between the two sources, census and reinterview, no reconciliation was done.

Movers were not followed up for the reinterview. Most whole household movers were verified by personal visit. No reinterview data were collected for individual movers (persons) within a sample household.

The average reinterview took about 23 minutes per household to conduct. The minimum interview was estimated to be 13 minutes and the maximum, 42 minutes.

The CATI system edits data for completeness as the interview is being conducted. Open-ended responses were coded clerically, keyed, and merged into the CATI file. Personal visit questionnaires were edited and reviewed for completeness by supervisors in the Census Regional Offices. At the conclusion of the interviewing period, all of the personal visit questionnaires were sent to the Decennial Processing Office (DPO) in Jacksonville, Florida. Openended questions were coded directly on the questionnaire. Personal visit forms were then sent to the DPO in Jeffersonville, Indiana, where they were keyed. Quality assurance procedures were integral parts of all operations.

#### **COMPUTER PROCESSING**

The CATI file and the keyed personal visit data were combined into one file of CRS data. This was matched with the unedited census file. All of the 12,891 sample housing units were matched. However, 19 of these housing units were eliminated from the CRS sample because 18 of them had been converted to vacants in the census and 1 was deleted during census processing. Therefore, the total sample size on which the housing information in this report is based is 12,872.

## CHAPTER 6. Data Limitations

The summary measures of response error presented in this report are subject to a number of limitations.

#### SAMPLING VARIABILITY

The data presented here are shown as numbers of sample housing units and sample persons, not as inflated national estimates. The sample was selected using equal probability methods so that each sample housing unit had the same weight. The measures used in this report are subject to sampling variability since they are based on sample data. A 90-percent confidence interval accompanies the measures of response error computed from these data.

#### SOURCE OF RESPONSE ERROR

This report concentrates on comparisons with census data before consistency edits and imputations for missing data were made as part of the computer processing operations. Thus, the response error measures reflect mainly errors which occurred during the field data-collection process. Edited census data, reflecting computer edits and imputations, are available and were analyzed. There was very little difference between the net difference rates and the indexes of inconsistency for the unedited or edited census data. This indicates that at high levels of geography, there was not much additional error which occurred due to the edit and allocation procedures.

#### **NONINTERVIEWS**

Initially, an oversample was drawn so that housing units vacant in the census could be eliminated from the sample. A sample of 12,891 housing units was sent to be interviewed. Of the interviews returned, 83.1 percent were completed. The refusal rate was 4.5 percent. In addition, 7.2 percent of the housing units had moved since the census and 1.0 percent were vacant at the time of the reinterview. In the "Other" category, 4.1 percent represented housing units which had language barriers, household members who were ill, hospitalized or temporarily absent, deceased and so forth.

Table 6-1 shows this information for the whole sample and separately for those housing units interviewed by CATI and those whose interviews were conducted by personal visit. As might be expected, many of the rates differ by source. All cases were sent to CATI first and only went to

Table 6.1. Results of Data Collection Operations for Sample Housing Units

Result—Housing Units	1	lumber of sing units		Percent
Total	<sup>1</sup> 12,872		100.0	
Interviews	10,698	10,224 474	83.1	79.4 3.7
Refusals	576 922 123 553		4.5 7.2 1.0 4.1	
CATI—Total	9,791		100.0	
Interviews	8,857	8,439 418	90.4	86.2 4.2
Refusals	483 142 0 309		5.0 1.5 0.0 3.1	
Personal visit—total	3,081		100.0	
Interviews	1,841	1,785 56	59.8	58.0 1.8
Refusals	93 780 123 244		3.0 25.3 4.0 7.9	

<sup>&</sup>lt;sup>1</sup>12,891 were sent to the field, but 19 sample units were eliminated because they were deleted from the census.

personal visit if the household could not be reached by telephone or if the CATI respondent requested a PV interview. Most whole household movers had to be field verified as did the vacants. Movers were not followed for this survey.

Approximately 91 percent of the persons in the CATI assigned housing units were interviewed. Another 1.5 percent of the persons refused their individual interview, 3.7 percent did not complete their interview, and 4.1 percent of the individual people in the household had moved, even though their household was still living there. See table 6-2.

#### **MATCHING**

In the past, matching CRS households and persons back to the census has been a problem which has sometimes caused data limitations. Efforts were made in

<sup>&</sup>lt;sup>2</sup>Housing units which had language barriers, household members who were ill, hospitalized or temporarily absent, deceased, and so forth.

Table 6.2. Results of CATI Operations for Sample Persons<sup>1</sup>

	Number of persons	Percent
CATI—Sample persons	22,788	100.0
Complete interview	849	90.6 3.7 1.5 4.1 0.0

<sup>1</sup>Only available for sample persons whose data were collected by CATI.

planning this evaluation to keep matching problems to a minimum. The housing unit sample was selected from the ACF (Address Control File) making it possible to track a housing unit through the census process. Then, names of the census occupants of the sample units and their corresponding person numbers on the household roster were keyed and maintained on both CATI and personal visit questionnaires. Using this information, all housing units were matched back to the census. Because of the method of sample selection, erroneous and questionable matches are not a problem for this survey.

There were a small number of matching problems with the person data. They are detailed in table 6-3. About 3,000 persons on the input file were not included on the CRS file, in small part due to a problem with the CATI system. These are the only cases in which actual data were lost. The major part of the nonmatches were persons for whom no data were collected in the CRS. They include household refusals, whole household movers, households where the occupants were absent, ill, or hospitalized for the duration of the survey. Also included were some housing units which CATI should have transferred to personal visit for interviewing but did not, and some cases which had invalid input and could not be processed for interview.

A small number of deletions had to be made to the CRS person file related to housing units deleted from the sample because they were converted to vacants in the census. Also, a duplicate person and several housing units that had keying errors were deleted.

When this CRS person file was matched to the census file, there were 60 people who did not match. These were mainly cases where the person was erroneously included on the input file. The name was available on the census questionnaire, but the person was not data defined (not sufficient data to be counted as a person). Therefore, there was no census information to which the CRS data could be matched.

#### **TIMING**

The CRS was conducted immediately following the completion of the decennial census field work. This was more than 5 months after the first census data were

Table 6.3. Person Matches

Number of persons on input file given to field for interviewing	32,839	
Number of persons on original CRS file	29,749	
Difference		3,090
CATI error on "next person" number—data not retrievable		459
No person data due to refusals, whole household movers, household absent, ill, or hospitalized, some housing units which CATI should have transferred to PV, and invalid input		2,631
Number of persons on original CRS file	29,749	
Deleted—census housing unit converted to vacant (18 HU's)	- 31 - 10	
Duplicate person number	_ 1	
CRS file	29,707	
Did not match to census <sup>1</sup>	- 60	
Matched person file	29,647	

<sup>1</sup>These are mainly cases where the person should not have been included on the input file; the person name was on the census questionnaire, but not enough data were provided to actually define a "person." Consequently, there was no census information to which a CRS match could be made.

collected and as much as 9 months before the final CRS data were collected. Timing of a reinterview survey is important because going to the field too soon after the original data collection can increase the effects of conditioning. There is also a potential loss of accuracy in the data collected if too much time passes. The magnitude of the effect of the time lag cannot be determined. It exists in varying degrees for many of the items included in the survey. There was also some data loss because some respondents had moved before the reinterview was conducted.

#### **CONVERSION HOUSEHOLDS**

The census problem of conversion households also affects the CRS sample. A conversion household is a housing unit which was sent a census long form, but the household returned the questionnaire with mainly shortform information. These housing units were on the unedited census file as long forms and, therefore, matched to sampled CRS cases. However, for the missing items, data comparisons could not be made, thus increasing the "not reported" category for many items. When the census file was edited, these long-form households were "converted" to short-form census households and the long-form data were weighted to account for this loss. In the CRS sample, there were 925 conversion households containing 2,023 persons. Of these people, 1,677 had CRS data although they had no census data. Their loss has an immeasurable effect on the survey results.

# TABLES. Summary Measures of Response Error

Table 1. Summary Measures of Response Error for Housing Characteristics Estimated From Response Variance Type Reinterview: 1990 Census

		Percent in	n class	Net differ	ence rate	Index of inconsistency	
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interva
H2: Which Best Describes This Building?	10,418	-	-	-	-	-	
A mobile home or trailer	-	6.6	6.7	-0.1	–0.2 to 0.1	7.9	6.7 to 9.3
A 1-family house detached from any other house	-	68.3	69.0	<b>*</b> -0.7	–1.0 to –0.4	9.4	8.7 to 10.2
A 1-family house attached to 1 or more houses	-	4.4	5.3	*-0.9	–1.1 to –0.6	33.8	30.8 to 37.0
A building with 2 apartments	-	3.8	2.5	* 1.3	1.0 to 1.5	40.4	36.5 to 44.8
A building with 3 or 4 apartments	-	3.7	3.6	0.1	–0.1 to 0.4	31.2	28.0 to 34.8
A building with 5 to 9 apartments	-	3.8	3.5	0.2	0.0 to 0.5	39.5	35.9 to 43.5
A building with 10 to 19 apartments	-	2.9	2.6	0.2	0.0 to 0.5	41.2	36.9 to 45.9
A building with 20 to 49 apartments	-	2.3	2.4	-0.1	–0.3 to 0.1	35.4	31.2 to 40.2
A building with 50 or more apartments	-	3.5	3.2	0.2	0.0 to 0.4	24.2	21.3 to 27.5
Other	-	0.8	1.2	*-0.4	–0.6 to –0.2	84.5	74.6 to 95.7
L-fold:							
Total units	10,418	-	-	-	-	21.9	21.0 to 23.0
Black householder	944	-	-	-	-	29.2	26.3 to 32.6
Non-Black householder	9,343	-	-	-	-	21.0	20.0 to 22.1
Spanish/ Hispanic householder	539	-	-	-	-	33.2	29.3 to 37.9
Non-Spanish/ Hispanic householder	9,460	-	-	-	-	21.2	20.2 to 22.3
Non-Black and non-Spanish/ Hispanic householder	8,536	-	-	-	-	20.1	19.0 to 21.3
H19A: Is This House on Less Than 1 Acre?	7,815						
Yes	-	75.3	76.0	*-0.8	−1.4 to −0.2	27.8	26.4 to 29.4
No	-	24.7	24.0	* 0.8	0.2 to 1.4	27.8	26.4 to 29.4
L-fold:					0.2 10 111		
Total units	7,815	_	_	_	_	27.8	26.4 to 29.4
Black householder <sup>1</sup>	·	70.0	95.0	.t. 6.0	0.0 to 3.6		
Non-Black householder <sup>1</sup>	548 7,207	79.2 74.9	85.9 75.2	*-6.8 -0.2	-9.9 to -3.6 -0.8 to 0.3	67.3 25.4	58.6 to 77.8 23.9 to 27.1
Spanish/Hispanic householder <sup>1</sup>	297	86.5	90.2	* <i>-</i> 3.7	-7.2 to -0.2	63.7	50.3 to 81.6
Non-Spanish/ Hispanic householder <sup>1</sup>	7,246	74.7	75.3	-0.6	–1.2 to 0.1	27.2	25.7 to 28.8
Non-Black and non-Spanish/ Hispanic householder <sup>1</sup>	6,704	74.3	74.4	0.0	-0.7 to 0.6	24.8	23.3 to 26.5
H19B: In 1989, What Were the Actual Sales of All Agricultural Products							
From This Property?	1,472	-	-	-	-	-	-
None	-	87.9	89.1	<b>* -</b> 1.2	–2.3 to –0.1	30.7	25.9 to 36.5
\$1 to \$999	-	3.3	2.4	0.9	0.0 to 1.8	75.6	61.2 to 93.3
\$1,000 to \$2,499	-	1.8	1.5	0.3	–0.2 to 0.9	56.0	40.9 to 76.8
\$2,500 to \$4,999	-	1.3	1.2				
\$5,000 to \$9,999	-	1.6	1.4	0.2	-0.3 to 0.7	54.3	38.6 to 76.4
\$10,000 or more	-	4.1	4.5	-0.3	–1.0 to 0.3	30.4	23.3 to 39.9
L-fold:							
Total units	1,472	-	-	-	-	41.7	36.2 to 48.2
Black householder	62	-	-	-	-		
Non-Black householder	1,403	-	-	-	-	40.0	34.5 to 46.4
Spanish/ Hispanic householder	23	-	-	-	-		
Non-Spanish/ Hispanic householder	1,408	-	-	-	-	41.2	35.6 to 47.7
Non-Black and non-Spanish/ Hispanic householder	1,348	-	-	-	-	39.6	34.0 to 46.1

<sup>\*</sup> Indicates significance at the 10-percent level.

<sup>&</sup>lt;sup>1</sup>Results for the category "Yes."

Not applicable.

<sup>...</sup> Not sufficient data to compute reliable response error measures.

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Table 2. Summary Measures of Response Error for Housing Characteristics Estimated From Response Bias Type Reinterview: 1990 Census

		Percent in c	lass	Net differe	ence rate	Index of inconsistency	
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interva
H4: Tenure—Is This House or Apartment?	10,314	-	-	-	-	-	
Owned by you or someone in this household with a mortgage or loan	-	45.2	43.3	* 1.9	1.5 to 2.3	13.4	12.6 to 14.3
Owned by you or someone in this household free and clear (without a mortgage)	-	25.8	28.5	* <i>-</i> 2.6	-3.0 to -2.2	15.3	14.3 to 16.3
Rented for cash rent	_	26.9	26.2	* 0.8	0.5 to 1.0	8.0	7.3 to 8.7
Occupied without payment of cash rent	_	2.0	2.1	0.0	-0.3 to 0.2	44.0	39.0 to 49.7
L-fold:							
Total units	10,314	_	_	_	_	13.3	12.6 to 14.0
Black householder	929	_	_	_	_	20.0	17.4 to 23.1
Non-Black householder	9,253	-	-	-	-[	12.7	17.4 to 23.1
	•	-	-	-	-		
Spanish/Hispanic householder	546	-	-	-	-	16.1	13.1 to 19.9
Non-Spanish/ Hispanic householder	9,360	-	-	-	-	13.2	12.5 to 14.0
Non-Black and non-Spanish householder.	8,447	-	-	-	-	12.6	11.9 to 13.4
H7A: What is the Monthly Rent?	2,449	-	-	-	-	-	-
Less than \$80	-	3.8	3.7	0.1	-0.4 to 0.6	29.7	23.6 to 37.3
\$80 to \$99	-	1.9	1.6	0.3	–0.1 to 0.7	45.0	34.5 to 58.7
\$100 to \$124	-	3.3	3.2	0.0	–0.4 to 0.5	30.6	24.0 to 38.8
\$125 to \$149	-	2.7	2.5	0.2	–0.2 to 0.7	38.5	30.4 to 48.8
\$150 to \$174	-	4.5	4.3	0.1	–0.4 to 0.7	31.6	25.8 to 38.8
\$175 to \$199	-	3.4	3.1	0.3	-0.2 to 0.8	31.8	25.2 to 40.3
\$200 to \$224	-	5.5	5.9	-0.4	-1.0 to 0.1	25.8	21.1 to 31.4
\$225 to \$249	-	3.7	3.2	0.5	0.0 to 1.0	32.5	25.9 to 40.7
\$250 to \$274	-	5.5	5.6	0.0	-0.6 to 0.6	30.1	24.9 to 36.3
\$275 to \$299	-	5.0	4.7	0.3	-0.3 to 0.9	33.0	27.3 to 39.9
\$300 to \$324	-	5.8	6.2	-0.4	-1.1 to 0.3	36.9	31.4 to 43.4
\$325 to \$349	-	4.0	3.7	0.2	-0.3 to 0.8	38.7	31.8 to 47.1
\$350 to \$374	-	5.7	5.6	0.1	-0.5 to 0.8	35.6	30.0 to 42.2 31.3 to 44.6
\$375 to \$399	-	5.0 5.2	4.9	0.2	-0.5 to 0.8 -1.1 to 0.3	37.4	31.3 to 44.6
\$400 to \$424 \$425 to \$449	-	3.6	5.6 3.3	-0.4 0.3	-0.3 to 0.9	42.2 48.7	40.6 to 58.6
\$450 to \$474	-	4.0	4.4	-0.4	-0.3 to 0.9 -1.0 to 0.2	45.6	38.3 to 54.2
\$475 to \$499	-	3.8	3.3	0.4	-0.1 to 1.0	36.5	29.6 to 45.1
\$500 to \$524	_	3.0	3.4	-0.4	-1.0 to 0.1	38.8	31.3 to 48.1
\$525 to \$549	_	2.0	1.7	0.3	-0.1 to 0.8	47.5	36.9 to 61.2
\$550 to \$599	_	4.6	4.6	0.0	-0.6 to 0.6	33.7	27.8 to 40.9
\$600 to \$649		2.6	3.7	* <b>–</b> 1.1	-1.6 to -0.5	38.8	31.3 to 48.2
\$650 to \$699	-	2.0	2.7	0.1	-0.4 to 0.6	38.3	30.4 to 48.2
\$700 to \$749	-	2.3	2.4	-0.1 -0.1	-0.4 to 0.8	31.8	24.2 to 41.8
\$750 to \$999	_	4.5	4.7	-0.1 -0.2	-0.7 to 0.2	17.6	13.5 to 23.0
\$1,000 or more	-	1.8	2.0	-0.2	-0.4 to 0.2	12.1	7.4 to 19.7
L-fold:							
Total units	2,449	_	_		_	34.7	33.1 to 36.4
Black householder	366	-	-	-	-	45.7	41.6 to 50.5
Non-black householder		-	-	-	-	32.5	30.8 to 34.4
	2,023	-	-	-	-		
Spanish/Hispanic householder	232	-	-	-	-	41.5	36.6 to 47.7
Non-Spanish/ Hispanic householder	2,098	-	-	-	-	34.0	32.4 to 35.9
Non-black and non-Spanish/ Hispanic householder	1,744	-	-	-	-	31.8	29.9 to 33.7

<sup>\*</sup> Indicates significance at the 10-percent level.

Not applicable.

<sup>...</sup> Not sufficient data to compute reliable response error measures.

Table 2. Summary Measures of Response Error for Housing Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent in	n class	Net differ	ence rate	Index of in	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
H7B: Does the Monthly Rent Include Any Meals?	2,463	_	_	_	_	_	
Yes	2,400	0.4	0.2				
No	-	99.6	99.8				
L-fold:							
Total units	2,463	-	-				
Black householder <sup>1</sup>	383	0.3	0.3				
Non-black householder <sup>1</sup>	2,020	0.3	0.2				
Spanish/ Hispanic householder <sup>1</sup>	230	0.4	0.0				
Non-Spanish/ Hispanic householder <sup>1</sup>	2,110	0.4	0.2				
Non-black and non-Spanish/ Hispanic householder <sup>1</sup>	1,741	0.4	0.2				
H10: Do You Have Complete Plumbing Facilities in This House or Apartment; That Is, 1) Hot and Cold Piped Water, 2) a Flush Toilet, and 3) a Bathtub or Shower?	10,035	-	-	-	-	-	
Yes	-	99.1	99.2	-0.1	-0.3 to 0.0	53.8	45.1 to 64.2
No	-	0.9	0.8	0.1	0.0 to 0.3	53.8	45.1 to 64.2
L-fold:							
Total units	10,035	99.1	99.2	-0.1	-0.3 to 0.0	53.8	45.1 to 64.2
Black householder <sup>1</sup>	886	98.0	98.6	-0.7	-1.5 to 0.1	61.0	41.5 to 89.7
Non-Black householder <sup>1</sup>	9,035	99.3	99.3	0.0	-0.2 to 0.1	50.4	41.0 to 61.8
Spanish/ Hispanic householder <sup>1</sup>	509	98.0	99.0	-1.0	-2.1 to 0.2	87.8	55.8 to 138.1
Non-Spanish/ Hispanic householder <sup>1</sup>	9,142	99.2	99.3	-0.1	-0.2 to 0.1	48.3	39.5 to 58.9
Non-Black and non-Spanish/ Hispanic householder <sup>1</sup>	8,270	99.3	99.3	0.0	-0.2 to 0.1	46.4	37.0 to 58.2
H13: How Many Automobiles, Vans, and Trucks of 1-Ton Capacity or Less Are Kept at Home for Use By Members of Your Household?	9,881	-	-	-	-	-	_
None	-	9.0	8.5	* 0.5	0.3 to 0.8	16.9	15.3 to 18.7
1	-	32.1	31.7	0.4	–0.2 to 0.9	22.6	21.4 to 23.8
2	-	39.1	39.4	-0.4	-1.0 to 0.3	32.1	30.9 to 33.4
3	-	14.4	14.4	0.1	–0.5 to 0.6	43.8	1.8 to 45.9
4	-	4.0	4.5	*-0.5	–0.9 to –0.2	61.1	56.7 to 65.8
5	-	1.0	1.2	-0.2	–0.4 to 0.0	73.7	64.6 to 84.1
6	-	0.3	0.3	0.0	–0.1 to 0.2	80.2	63.3 to 101.7
7 or more	-	0.2	0.1	0.1	0.0 to 0.1	69.3	47.1 to 101.9
L-fold:							
Total units	9,881	-	-	-	-	32.1	31.1 to 33.1
Black householder	857	-	-	-	-	36.1	32.9 to 39.7
Non-Black householder	8,916	-	-	-	-	31.9	30.9 to 32.9
Spanish/ Hispanic householder	500	-	-	-	-	42.9	38.6 to 47.9
Non-Spanish/ Hispanic householder	9,012	-	-	-	-	31.9	30.9 to 33.0
Non-Black and non-Spanish/ Hispanic householder	8,166	-	-	-	-	31.7	30.7 to 32.8

<sup>\*</sup> Indicates significance at the 10-percent level.

1 Results for the category "Yes."

<sup>-</sup> Not applicable.

<sup>...</sup> Not sufficient data to compute reliable response error measures.

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Table 2. Summary Measures of Response Error for Housing Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent	in class	Net differ	ence rate	Index of ind	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
H17: About When Was This Building First Built?	9,825	-	-	-	-	-	-
1989 or 1990	-	1.1	1.5	<b>*</b> -0.4	–0.6 to –0.2	46.0	39.5 to 53.7
1985 to 1988	-	7.3	7.7	*-0.4	–0.7 to –0.1	23.2	21.2 to 25.4
1980 to 1984	-	7.5	7.9	-0.4	–0.8 to 0.0	36.5	33.9 to 39.2
1970 to 1979	-	19.1	21.1	<b>* -</b> 2.0	–2.5 to −1.5	28.8	27.3 to 30.4
1960 to 1969	-	13.9	14.8	<b>*</b> -0.9	–1.4 to –0.4	38.4	36.4 to 40.5
1950 to 1959	-	12.5	13.3	*-0.8	–1.3 to –0.3	39.2	37.1 to 41.5
1940 to 1949	-	6.9	7.6	* <i>-</i> 0.7	–1.1 to –0.2	50.0	46.9 to 53.3
1939 or earlier	-	14.6	19.3	* <i>-</i> 4.7	–5.2 to –4.2	34.9	33.1 to 36.8
Don't know	-	17.1	6.8	* 10.2	9.6 to 10.9	76.8	74.0 to 79.7
L-fold:							
Total units	9,825	-	-	-	-	40.6	39.7 to 41.5
Black householder	826	-	-	-	-	65.4	62.3 to 68.9
Non-Black householder	8,892	-	-	-	-	38.1	37.2 to 39.1
Spanish/ Hispanic householder	477	-	-	-	-	61.0	57.0 to 65.6
Non-Spanish/ Hispanic householder	8,976	-	-	-	-	39.2	38.3 to 40.2
Non-Black and non-Spanish/ Hispanic householder	8,160	-	_	-	-	36.8	35.8 to 37.8

<sup>\*</sup> Indicates significance at the 10-percent level.

<sup>-</sup> Not applicable.

<sup>...</sup> Not sufficient data to compute reliable response error measures.

Table 3. Summary Measures of Response Error for Population Characteristics Estimated From Response Variance Type Reinterview: 1990 Census

		Percent in o	class	Net differe	ence rate	Index of inc	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
P7: Is This Person of Spanish/Hispanic Origin?	23,979	-	-	-	-	-	-
No (not Spanish/ Hispanic)	-	93.3	93.0	* 0.3	0.2 to 0.4	9.3	8.4 to 10.2
Yes, Mexican, Mexican-American, Chicano .	-	4.1	4.2	-0.1	-0.2 to 0.0	8.5	7.5 to 9.7
Yes, Puerto Rican	-	0.8	0.8	0.0	0.0 to 0.0	8.6	6.4 to 11.5
Yes, Cuban	-	0.3	0.3	0.0	0.0 to 0.0	13.6	9.4 to 19.5
Yes, other Spanish/ Hispanic	-	1.6	1.7	-0.1	-0.2 to 0.0	34.1	30.8 to 37.7
L-fold:							
Total persons	23,979	-	-	-	_	12.2	11.2 to 13.2
Male	11,448	-	-	-	-	12.5	11.2 to 14.1
Female	12,408	-	-	-	-	11.7	10.4 to 13.2
White	20,149	-	-	-	-	14.7	13.2 to 16.3
Black	2,232	-	-	-	-	61.4	44.2 to 85.2
Other	1,223	-	-	-	-	12.5	10.5 to 14.8
P10: When Did This Person Come to the United States to Stay?	1,349	_	_	_	_	_	_
1987 to 1990	-	12.0	11.8	0.2	-0.7 to 1.1	18.7	15.0 to 23.5
1985 or 1986	_	7.9	7.9	-0.1	-1.0 to 0.9	32.1	26.1 to 39.5
1982 to 1984	_	9.4	8.9	0.5	-0.5 to 1.5	29.9	24.4 to 36.5
1980 or 1981		7.6	9.3	* <b>–</b> 1.6	-2.7 to -0.5	38.3	31.9 to 46.0
1975 to 1979		14.8	13.8	1.0	-0.1 to 2.1	24.5	20.4 to 29.5
1970 to 1974	-	10.7	10.7	0.1	-0.1 to 2.1 -0.8 to 1.0	20.5	20.4 to 29.5
1965 to 1969	-	8.2	8.5	-0.2	-0.8 to 1.0 -1.1 to 0.6	23.8	18.8 to 30.0
1960 to 1964		6.7	6.4	0.2	-0.5 to 0.9	18.7	14.0 to 25.2
1950 to 1959	_	12.6	13.3	-0.7	-1.5 to 0.2	16.1	12.8 to 20.4
Before 1950	_	10.1	9.5	0.6	-0.1 to 1.3	12.6	9.3 to 17.0
L-fold:			0.0	0.0		.2.0	0.0 10 1110
	1,349					23.0	21.1 to25.2
Total persons	633	-	-	-	-	23.0	20.1 to 26.0
Female	707	-	-	-	-	23.2	20.1 to 26.0 20.6 to 26.2
\\/\bita	707	-		-	-	19.3	16.9 to 22.2
Black	63	-		-	-	25.6	18.2 to 38.1
Other	477	_	_	_	_	24.4	21.1 to 28.2
P11: At Any Time Since February 1, 1990 Has This Person Attended Regular	477					24.4	21.1 10 20.2
School or College?	23,292	-	-	-	-	-	-
No, has not attended since February 1	-	76.3	75.5	* 0.7	0.5 to 1.0	15.1	14.4 to 15.8
Yes, public school, public college	-	20.3	20.8	* <i>-</i> 0.5	-0.8 to -0.3	16.8	16.0 to 17.6
Yes, private school, private college	-	3.5	3.7	*-0.2	–0.4 to –0.1	31.2	29.0 to 33.6
L-fold:							
Total persons	23,292	-	-	-	-	17.3	16.6 to 18.0
Male	11,062	-	-	-	-	16.6	15.6 to 17.6
Female	12,105	-	-	-	-	18.0	17.0 to 19.1
WhiteBlack	19,724 2,079	-	-	-	-	16.4 22.1	15.6 to 17.2 19.7 to 24.8
Other	2,079 1,129	-	-	-	-	22.1	19.7 to 24.8

<sup>\*</sup> Indicates significance at the 10-percent level. - Not applicable. ... Not sufficient data to compute response error measures.

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Table 3. Summary Measures of Response Error for Population Characteristics Estimated From Response Variance Type Reinterview: 1990 Census—Con.

		Percent	in class	Net differ	ence rate	Index of inconsistency	
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
P28C: Is This Industry Mainly?	11,480	-	-	-	-	-	-
Manufacturing	-	17.4	17.5	-0.1	-0.5 to 0.3	23.3	22.0 to 24.7
Wholesale trade	-	4.0	4.7	*-0.7	–1.1 to –0.4	57.9	54.0 to 62.1
Retail trade	-	16.2	16.9	* <i>-</i> 0.7	−1.2 to −0.2	39.1	37.5 to 40.9
Other	-	62.4	60.9	* 1.5	0.9 to 2.1	30.0	28.9 to 31.1
L-fold:							
Total persons	11,480	-	-	-	-	32.6	31.6 to 33.7
Male	6,158	-	-	-	-	34.7	33.3 to 36.1
Female	5,278	-	-	-	-	30.4	28.9 to 32.1
White	10,024	-	-	-	-	31.7	30.6 to 32.8
Black	802	-	-	-	-	40.4	36.1 to 45.4
Other	518	-	-	-	-	39.1	34.3 to 44.9

<sup>\*</sup> Indicates significance at the 10-percent level.

Not applicable.

<sup>...</sup> Not sufficient data to compute response error measures.

Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census

		Percent in	class	Net diffe	rence rate	Index of in	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interva
P4: What Is This Person's Race?	24,539	-	-	-	-	-	
White	-	85.2	85.7	*-0.5	-0.7 to -0.3	13.5	12.8 to 14.3
Black or Negro	-	9.7	9.8	-0.1	-0.2 to 0.0	3.9	3.5 to 4.4
Indian (American)	-	0.5	0.5	0.0	–0.1 to 0.1	40.7	34.4 to 48.2
Eskimo	-	0.0	0.0	0.0	0.0 to 0.0	100.0	33.0 to 302.3
Aleut	-	0.0	0.0	0.0	0.0 to 0.0		
Chinese	-	0.4	0.4	0.0	-0.1 to 0.0	13.1	9.5 to 18.2
Filipino	-	0.5	0.4	0.1	0.0 to 0.1	11.7	8.4 to 16.2
Hawaiian	-	0.1	0.1	0.0	0.0 to 0.0	38.8	26.7 to 56.5
Korean	-	0.3	0.3	0.0	0.0 to 0.0	5.5	3.0 to 10.2
Vietnamese	-	0.1	0.1	0.0	0.0 to 0.0 0.0 to 0.0	17.7 13.3	10.3 to 30.4 9.0 to 19.5
Japanese Asian Indian	-	0.3	0.3	0.0	0.0 to 0.0	16.7	11.4 to 24.6
Samoan	-	0.2	0.2	0.0	0.0 to 0.0	71.4	34.7 to 146.8
Guamanian	]	0.0	0.0	0.0	0.0 to 0.0	5.3	1.2 to 23.6
Other API	_	0.3	0.3	0.0	-0.1 to 0.1	82.9	71.9 to 95.6
Other race	_	2.4	1.9	* 0.6	0.4 to 0.7	70.3	66.1 to 74.8
L-fold:		2.4	1.5	0.0	0.4 10 0.7	70.5	00.1 10 74.0
	24 520					16.2	15.5 to 17.1
Total persons	24,539	-	-	-	-	16.3	
Male	11,674	-	-	-	-	18.5	17.3 to 19.9
Female	12,751	-	-	-	-	14.5	13.4 to 15.6
White	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
P8: In What U.S. State or Foreign Country Was This Person Born?	17,046	-	_	-	-	-	-
Alabama	-	2.3	2.3	0.0	-0.1 to 0.0	4.0	3.0 to 5.4
Alaska	-	0.1	0.2	-0.1	-0.1 to 0.0	56.8	39.7 to 81.2
Arizona	-	0.5	0.6	0.0	-0.1 to 0.0	11.5	8.1 to 16.3
Arkansas	-	1.4	1.3	0.1	0.0 to 0.2	6.0	4.4 to 8.2
California	-	5.1	5.1	0.0	0.0 to 0.1	4.6	3.8 to 5.6
Colorado	-	8.0	0.9	0.0	–0.1 to 0.0	5.5	3.7 to 8.3
Connecticut	-	1.1	1.1	0.0	-0.1 to 0.0	6.6	4.8 to 9.2
Delaware	-	0.1	0.1	0.0	0.0 to 0.0	12.0	6.2 to 23.2
District of Columbia	-	0.4	0.4	0.0	0.0 to 0.1	13.5	9.2 to 19.8
Florida	-	1.8	1.7	0.1	0.0 to 0.1	8.3	6.5 to 10.5
Georgia	-	2.2	2.2	0.0	-0.1 to 0.0	4.3	3.2 to 5.8
Hawaii	-	0.3	0.3	0.0	0.0 to 0.0	2.8	1.1 to 6.9
Idaho	-	0.3 5.7	0.3 5.8	0.0	0.0 to 0.0 -0.1 to 0.0	4.5 2.7	2.0 to 9.9 2.1 to 3.4
Indiana	-	2.7	2.8	-0.1	-0.1 to 0.0 -0.2 to 0.0	5.5	4.4 to 6.9
	-	1.9			0.0 to 0.1		4.4 to 0.8
lowa	-		1.8 1.4	0.1 0.1	0.0 to 0.1	6.0 7.0	5.3 to 9.3
Kentucky		1.4 2.3	2.2	0.1	0.0 to 0.1	4.2	3.2 to 5.6
Louisiana		2.3	2.2	0.1	-0.1 to 0.0	3.2	2.3 to 4.5
Maine	_	0.5	0.5	0.0	0.0 to 0.0	5.2	3.0 to 8.9
Maryland	_	1.2	1.2	0.0	0.0 to 0.0	5.8	4.1 to 8.1
Massachusetts	_	2.5	2.5	0.0	0.0 to 0.1	4.5	3.4 to 5.9
		4.0	4.1	* <i>-</i> 0.1	-0.2 to -0.1	4.7	3.8 to 5.8
Michigan	-	2.3	2.3	* -0.1 0.0	0.2 to -0.1	4.7	3.8 to 5.8
Mississippi		1.7	1.7	0.0	0.0 to 0.1	6.4	4.9 to 8.4
Missouri		2.5	2.6	-0.1	-0.1 to 0.0	6.5	5.2 to 8.1
		2.0	0.2	0.0	0.0 to 0.1	0.5	1 0.2 10 0.1

<sup>\*</sup> Indicates significance at the 10-percent level. - Not applicable.

<sup>...</sup> Not sufficient data to compute response error measures.

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Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent in	class	Net differ	ence rate	Index of in	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
P8: In What U.S. State or Foreign Country Was This Person Born?—Con.							
Nebraska	-	0.8	0.8	0.0	0.0 to 0.0	2.2	1.1 to 4.2
Nevada	-	0.1	0.1	0.0	0.0 to 0.0	8.1	3.2 to 20.3
New Hampshire	-	0.3	0.3	0.0	0.0 to 0.1	7.4	4.0 to 13.6
New Jersey	-	2.3	2.3	0.0	-0.1 to 0.1	6.1	4.8 to 7.8
New Mexico	-	0.3	0.3	0.0	0.0 to 0.0	13.8	8.9 to 21.3
New York	_	7.5	7.5	0.0	-0.1 to 0.1	4.4	3.8 to 5.2
North Carolina	_	2.8	2.8	0.0	-0.1 to 0.1	4.7	3.7 to 6.0
		0.4	0.4	0.0	0.0 to 0.0	4.6	2.4 to 9.0
North Dakota	-	5.2	5.2				
Ohio	-	-		0.0	-0.1 to 0.1	4.6	3.8 to 5.6
Oklahoma	-	1.5 0.5	1.5 0.5	0.0	0.0 to 0.1	5.0 5.4	3.6 to 7.0
Oregon	-			0.0	0.0 to 0.0		3.2 to 9.0
Pennsylvania	-	5.9 0.5	5.8	0.1	0.0 to 0.1 0.0 to 0.1	2.4 6.4	1.9 to 3.0
Rhode Island	-	1.7	0.5 1.7	0.0	0.0 to 0.1	5.4 5.2	3.8 to 10.6
	-			0.0		_	3.8 to 7.0
South Dakota	-	0.3	0.3	0.0	0.0 to 0.0	6.4	3.5 to 11.9
Tennessee	-	2.3	2.3	0.0	-0.1 to 0.0	5.4	4.2 to 7.0
Texas	-	4.9	4.9	0.0	-0.1 to 0.1	3.9	3.2 to 4.8
Utah	-	0.5	0.5	0.0	0.0 to 0.0	7.0	4.3 to 11.5
Vermont	-	0.1	0.1	0.0	0.0 to 0.0	11.1	5.0 to 24.8
Virginia	-	2.2	2.2	0.0	-0.1 to 0.1	7.1	5.7 to 9.0
Washington	-	1.2	1.2	0.0	0.0 to 0.1	4.1	2.8 to 6.1
West Virginia	-	1.3	1.3	0.0	0.0 to 0.1	5.0	3.5 to 7.0
Wisconsin	-	2.9	2.9	0.0	0.0 to 0.1	1.8	1.2 to 2.6
Wyoming	-	0.2	0.2	0.0	0.0 to 0.0	1.8	0.4 to 7.9
Puerto Rico	-	0.3	0.4	0.0	–0.1 to 0.0	15.1	10.2 to 22.1
Guam	-	0.0	0.0	0.0	0.0 to 0.0	0.0	0.0 to 16.9
American Samoa	-	0.0	0.0	0.0	0.0 to 0.0	33.3	7.4 to 149.5
U.S. Virgin Islands	-	0.0	0.0	0.0	0.0 to 0.0		
Other U.S. trusts and possessions	-	0.0	0.0	0.0	0.0 to 0.0	50.0	16.5 to 151.2
Canada	-	0.3	0.3	0.0	0.0 to 0.0	6.5	3.4 to 12.6
Mexico	-	1.1	1.2	0.0	–0.1 to 0.0	6.7	4.9 to 9.3
All other responses	-	5.0	5.0	-0.1	-0.2 to 0.0	4.6	3.8 to 5.6
L-fold:							
Total persons	17,046	-	-	-	-	4.9	4.6 to 5.2
Male	7,826	-	-	-	-	4.8	4.4 to 5.2
Female	9,220	_	_	_	_	4.9	4.6 to 5.3
White	14,467	_	_	_	_ ]	4.3	4.0 to 4.6
Black		-	-	-	-]	9.0	
	1,680	-	-	-	-		7.9 to 10.3
Other	899	-	-	-	-	7.8	6.2 to 9.6

<sup>\*</sup> Indicates significance at the 10-percent level.

<sup>-</sup> Not applicable.

<sup>...</sup> Not sufficient data to compute response error measures.

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Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent in	class	Net differ	rence rate	Index of in	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interva
P9: Is This Person a Citizen of the United States?	23,406	-	-	-	-	-	
Yes, born in the United States	-	93.5	93.8	* <i>-</i> 0.3	-0.4 to -0.2	5.8	5.1 to 6.6
Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas	-	0.4	0.4	0.0	0.0 to 0.1	24.2	18.8 to 31.2
Yes, born abroad of American parent of		0.4	0.4	0.0	0.0 to 0.4	25.0	00.0 to 40.4
parents	-	0.4	0.4	0.0	0.0 to 0.1	35.2	28.8 to 43.1
Yes, U.S. citizen by naturalization	-	2.6	2.4	* 0.3	0.2 to 0.4	18.7	16.7 to 21.0
No, not a citizen of the United States	-	3.0	3.1	0.0	-0.1 to 0.0	9.9	8.6 to 11.3
L-fold:							
Total persons	23,406	-	-	-	-	10.9	10.0 to 12.0
Male	11,095	-	-	-	-	11.2	9.8 to 12.8
Female	12,186	-	-	-	-	10.8	9.5 to 12.3
White	19,817	-	-	-	-	11.3	10.0 to 12.8
Black	2,091	-	-	-	-	15.1	10.5 to 21.5 11.0 to 15.6
Other	1,137 1,442	-		-	-	13.1 16.0	13.8 to 18.4
Non-Hispanic	21,177	-	-	-	-	10.0	8.9 to 11.4
·	,					-	
P12: How much school has this person completed?	20,259	-	-	-	-	-	-
No school completed	_	7.7	8.2	* <i>-</i> 0.5	-0.7 to -0.4	14.7	13.6 to 15.9
Nursery school	-	1.8	1.7	0.1	0.0 to 0.3	60.8	56.1 to 65.9
Kindergarten	-	1.3	1.1	* 0.2	0.1 to 0.3	58.1	52.6 to 64.2
1st, 2nd, 3rd, or 4th grade	_	3.7	4.0	* <i>-</i> 0.2	-0.4 to -0.1	25.9	23.9 to 28.2
5th, 6th, 7th, or 8th grade	-	6.9	6.7	0.2	0.0 to 0.4	26.7	25.0 to 28.4
9th grade	_	2.9	3.2	*-0.4	-0.6 to -0.1	55.8	52.3 to 59.4
10th grade	_	4.7	5.0	-0.2	-0.5 to 0.0	52.9	50.2 to 55.7
11th grade	_	4.3	5.4	* <i>-</i> 1.1	–1.4 to –0.8	59.5	56.6 to 62.5
12th grade, no diploma	_	2.8	0.7	* 2.1	1.9 to 2.3	96.7	90.7 to 103.1
High school graduate	_	26.7	27.9	* <b>-</b> 1.2	-1.6 to -0.8	28.5	27.6 to 29.4
Some college but no degree	_	16.4	15.9	* 0.5	0.2 to 0.8	31.3	30.1 to 32.6
		2.5		* 0.7	0.5 to 0.9		
Associate degree—occupational	-		1.8			58.5	54.3 to 63.0
Associate degree—academic	-	2.1	1.7	* 0.4	0.2 to 0.5	48.6	44.6 to 53.0
Bachelor's degree	-	10.8 3.7	11.2 3.7	*-0.4 0.0	-0.5 to-0.2 -0.1 to 0.1	9.9 9.4	9.1 to 10.8 8.1 to 10.8
Professional school degree	-	1.3	1.0	* 0.2	0.1 to 0.3	45.4	40.5 to 50.8
Doctorate degree	-	0.6	1.0	*-0.4	–0.5 to –0.3	32.9	28.0 to 38.8
L-fold:							
Total Persons	20,259	-	-	-	-	32.3	31.7 to 32.9
Male	9,610	-	-	-	-	32.0	31.1 to 32.8
Female	10,551	-	-	-	-	32.6	31.7 to 33.4
White	17,273	-	-	-	-	30.5	29.9 to 31.2
Black	1,790 914	-	-	-	-	41.9 41.7	39.9 to 44.1 39.0 to 44.8

<sup>\*</sup> Indicates significance at the 10-percent level. - Not applicable. ... Not sufficient data to compute response error measures.

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Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent in	class	Net diffe	rence rate	Index of ind	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
P13: What is this person's ancestry or ethnic origin? (single response only)	7,513	_	_	_	_	_	_
Arab	- 7,515	0.3	0.4	0.0	-0.1 to 0.0	7.7	3.5 to 17.2
Austrian	_	0.3	0.3	0.0	-0.1 to 0.1	28.7	17.9 to 45.9
Belgian	_	0.1	0.0	0.0	0.0 to 0.0	0.0	0.0 to 19.4
Canadian	_	0.1	0.2	-0.1	-0.2 to 0.0		
		0.5	0.7	*-0.2	-0.3 to -0.1	33.5	24.9 to 45.2
Czech  Danish	-	0.3	0.7	0.1	0.0 to 0.1	13.1	6.8 to 25.3
Dutch	-	1.1	1.2	-0.1 -0.1	-0.2 to 0.0	25.6	19.9 to 33.0
	-	6.6	6.4	0.1	-0.2 to 0.6	37.3	34.1 to 40.8
English	-	0.0	0.4	0.2	0.0 to 0.1	10.4	4.1 to 25.9
	-						
French (except Basque)	-	1.1	1.7	* <i>-</i> 0.6	–0.8 to –0.4	42.6	35.7 to 50.8
French Canadian	-	1.2	0.5	* 0.7	0.5 to 0.9	53.6	43.8 to 65.6
German	-	18.1	17.9	0.2	-0.2 to 0.6	14.5	13.3 to 15.9
Greek	-	0.3	0.3	0.0	0.0 to 0.0	0.0	0.0 to 5.4
Hungarian	-	0.7	0.7	0.0	-0.1 to 0.0	7.9	4.4 to 14.0
Irish	-	7.8	8.1	-0.3	-0.7 to 0.1	29.0	26.4 to 31.8
Italian	-	5.8	5.7	0.1	-0.1 to 0.2	4.9	3.8 to 6.4
Lithuanian	-	0.2	0.2	0.0	0.0 to 0.1	20.0	10.9 to 37.0
Norwegian	-	1.2	1.4	-0.1	-0.3 to 0.0	13.0	9.4 to 18.4
Polish	-	3.0	3.0	0.0	–0.1 to 0.1	5.9	4.3 to 8.1
Portuguese	-	0.6	0.5	0.0	0.0 to 0.1	3.7	1.5 to 9.3
Romanian	-	0.1	0.2	0.0	–0.1 to 0.0	16.7	7.5 to 37.2
Russian	-	0.8	0.9	0.0	–0.2 to 0.1	32.6	25.2 to 42.1
Scotch-Irish	-	1.3	0.9	* 0.4	0.2 to 0.6	60.6	51.4 to 71.5
Scottish	-	0.9	1.4	*-0.4	-0.6 to -0.2	38.0	31.0 to 46.6
Slovak	-	0.6	0.4	* 0.3	0.1 to 0.4	35.2	25.7 to 48.3
Subsaharan African	_	0.3	0.8	* <i>-</i> 0.5	-0.6 to -0.3	72.5	58.3 to 90.1
Swedish	_	0.9	0.9	0.0	-0.1 to 0.1	24.7	18.5 to 32.8
Swiss	_	0.2	0.2	0.0	-0.1 to 0.0	23.1	11.9 to 44.7
Ukrainian	_	0.3	0.3	0.0	0.0 to 0.1	23.5	14.4 to 38.4
United States or American	_	7.6	6.8	* 0.8	0.2 to 1.4	71.5	67.3 to 76.0
Welsh	_	0.2	0.3	-0.1	-0.2 to 0.0	45.1	30.7 to 66.3
West Indian	_	0.8	0.8	0.0	-0.1 to 0.1	13.7	9.2 to 20.4
Yugoslavian	_	0.3	0.0	0.0	0.0 to 0.1	21.1	11.9 to 37.5
Race or Hispanic origin groups	-	28.7	25.6	* 3.1	2.6 to 3.5	15.0	13.9 to 16.2
Other groups	-	6.5	6.7	-0.3	-0.6 to 0.1	22.8	20.3 to 25.5
Unclassified	-	0.9	4.0	* <i>-</i> 3.0	–3.4 to –2.6	90.5	82.7 to 99.1
L-fold:							
Total persons	7,513	-	-	-	-	26.5	25.6 to 27.4
Male	3, 534	-	-	-	-	26.6	25.3 to 28.0
Female	3,979	-	-	-	-	26.4	25.1 to 27.7
White	5,436	-	-	-	-	29.2	28.2 to 30.3
Black	1,384	-	-	-	-	68.9	63.2 to 75.3
Other	693	-	-	-	-	9.1	6.9 to 12.1
Foreign born	6,665 848	-	-	-	-	29.0 7.5	28.0 to 30.0 5.9 to 9.5

<sup>\*</sup> Indicates significance at the 10-percent level. - Not applicable. ... Not sufficient data to compute response error measures.

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Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent in	class	Net differ	ence rate	Index of ind	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
	Campic Size	OCTIONS	ORO	Estimate	interval	Estimate	IIICIVAI
P15A: Does this person speak a language other than English at home?	21,752	_	-	_	_	_	<u>-</u>
Yes		10.1	10.1	0.0	-0.2 to 0.3	26.9	25.6 to 28.3
No	-	89.9	89.9	0.0	-0.3 to 0.2	26.9	25.6 to 28.3
L-fold:							
Total persons	21,752	10.1	10.1	0.0	-0.2 to 0.3	26.9	25.6 to 28.3
Male <sup>1</sup>	10,262	10.0	10.3	-0.3	-0.7 to 0.0	25.8	24.0 to 27.9
Female <sup>1</sup>	11,376	10.3	10.0	0.3	0.0 to 0.7	27.8	26.0 to 29.8
White <sup>1</sup>	18,487	7.0	7.2	-0.1	-0.4 to 0.1	33.2	31.4 to 35.2
Black <sup>1</sup>	1,910	4.0	3.2	0.7	-0.1 to 1.6	72.1	61.0 to 85.3
Other <sup>1</sup>	1,030	66.0	64.5	1.6	-0.3 to 3.4	28.7	25.2 to 32.8
Hispanic <sup>1</sup>	1,305	71.8	73.3	-1.5	-3.0 to 0.1	27.9	24.5 to 31.7
Non-Hispanic <sup>1</sup>	19,728	6.1	6.0	0.1	-0.1 to 0.3	39.2	37.1 to 41.4
P15B: What is this language?	1,261	-	-	-	-	-	-
German	-	5.0	4.9	0.1	-0.3 to 0.5	7.6	4.4 to 13.0
Yiddish	-	0.1	0.2	-0.1	-0.4 to 0.1	33.4	7.4 to 149.6
Scandinavian	-	0.5	0.5	0.0	-0.2 to 0.2	0.0	0.0 to 22.7
Greek	-	0.8	0.8	0.0	–0.2 to 0.2	10.1	3.3 to 30.5
Indic	-	1.7	1.4	0.3	0.0 to 0.7	10.2	4.6 to 22.6
Italian	-	4.1	4.0	0.1	-0.2 to 0.4	5.1	2.5 to 10.4
French	-	5.8	6.4	*-0.6	–1.1 to –0.2	6.9	4.1 to 11.6
Portuguese	-	1.5	1.4	0.1	–0.1 to 0.4	2.7	0.6 to 12.3
Spanish	-	52.9	52.3	* 0.6	0.1 to 1.1	2.2	1.4 to 3.4
Polish	-	2.5	2.6	-0.1	-0.4 to 0.1	1.6	0.4 to 7.1
Russian	-	0.6	0.6	0.0	-0.2 to 0.2	0.0	0.0 to 17.0
Slavic	-	1.6	1.5	0.1	-0.2 to 0.4	13.0	6.3 to 26.8
Other Indo-European languages	-	2.4	2.3	0.1	–0.2 to 0.4	8.7	4.2 to 17.8
Arabic	-	1.3	1.4	-0.2	–0.5 to 0.1	6.0	2.0 to 18.0
Tagalog	-	3.1	3.2	-0.1	-0.5 to 0.3	11.8	6.8 to 20.2
Chinese	-	5.2	5.1	0.2	-0.1 to 0.4	3.2	1.5 to 7.2
Hungarian	-	1.7	1.4	0.2	0.0 to 0.6	7.8	3.1 to 19.6
Japanese	-	1.3	1.3 0.8	0.1	-0.1 to 0.4	3.1 9.2	0.7 to 13.8 3.0 to 27.7
MonKhmer	-	1.0 2.7	2.7	0.2	-0.1 to 0.5	0.0	
Korean	-	0.2	0.2	0.0	-0.2 to 0.2 -0.2 to 0.2	0.0	0.0 to 4.1 0.0 to 45.2
Vietnamese	_ [	0.2	0.2	0.0	-0.2 to 0.2	0.0	0.0 to 45.2 0.0 to 12.4
	-						
Other languages	-	3.1	4.0	* <i>-</i> 1.0	–1.5 to –0.5	16.1	10.4 to 24.9
L-fold:							
Total persons	1,261	-	-	-	-	5.2	4.0 to 6.6
Male	594	-	-	-	-	5.4	3.9 to 7.7
Female	667	-	-	-	-	4.9	3.5 to 6.9
White	712	-	-	-	-	5.4	4.0 to 7.4
Black	27	-	-	-	-	14.6	4.8 to 44.0
Other	522	-	-	-	-	4.8	3.2 to 7.2

<sup>\*</sup> Indicates significance at the 10-percent level. - Not applicable.

¹ Results for the category "Yes."

<sup>...</sup> Not sufficient data to compute response error measures.

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Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent in	class	Net differ	ence rate	Index of in	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
P15C: How well does this person speak							
English?	1,834	-	-	-	-	-	-
Very well	_	55.2	53.1	* 2.2	0.2 to 4.1	51.4	48.1 to 54.9
Well	-	25.6	24.0	1.6	-0.4 to 3.6	74.7	70.3 to 79.5
Not well	-	13.5	16.4	* <i>-</i> 2.9	-4.5 to −1.4	61.7	56.5 to 67.5
Not at all	-	5.7	6.5	-0.8	-1.7 to 0.1	48.8	41.5 to 57.3
L-fold:							
Total persons	1,834	-	-	-	-	60.3	57.4 to 63.4
Male	882	-	-	-	-	57.8	53.7 to 62.4
Female	942	-	-	-	-	62.7	58.8 to 67.2
White	1,020	-	-	-	-	60.7	56.7 to 65.2
Black	39	-	-	-	-	81.3	62.5 to 113.8
Other	630	-	-	-	-	58.4	53.9 to 63.5
Hispanic	911 877	-	-	-	-	60.5 62.5	56.8 to 64.6 57.8 to 67.7
Non-Hispanic	0//	-	-	-	-	02.5	37.0 10 67.7
P17A: Has this person ever been on active-duty military service in the Armed Forces of the United States or ever been in the United States military Reserves or the National Guard?	18,364	-	-	-	-	-	-
Yes, now on active duty	-	1.0	0.5	* 0.5	0.4 to 0.6	35.0	29.7 to 41.3
Yes, on active duty in past, but not now	-	14.5	15.0	*-0.5	-0.7 to -0.3	8.3	7.6 to 9.0
Yes, service in Reserves or National Guard							
only	-	1.8	1.9	-0.1	–0.2 to 0.0	27.6	24.4 to 31.2
No	-	82.7	82.6	0.1	0.0 to 0.2	5.0	4.5 to 5.5
L-fold:							
Total persons	18,364	-	-	-	-	8.5	7.9 to 9.2
Male Female	8,554 9,717	-		- 1		9.5 28.5	8.8 to 10.3 23.1 to 35.3
White	15,735	-	-	-	-	7.8	7.2 to 8.5
Black	1,537	-	-	-	-	17.5	14.1 to 21.8
Other	823	-	-	-	-	15.4	10.7 to 22.2
P17B1: Was active-duty military service during September 1980 or later? .	2,116	-	-	-	-	-	-
Yes	-	6.0	7.6	<b>*</b> –1.6	–2.1 to −1.0	18.2	14.4 to 23.0
No	-	94.0	92.4	* 1.6	1.0 to 2.1	18.2	14.4 to 23.0
L-fold:1							
Total persons	2,116	-	-	-	-	18.2	14.4 to 23.0
P17B2: Was active-duty military service during May 1975 to August 1980?	2,116	_	_	_	-	_	_
Yes	-,	7.1	10.7	* <i>-</i> 3.6	-4.3 to -2.9	24.9	20.8 to 29.7
	-						
No	-	92.9	89.3	* 3.6	2.9 to 4.3	24.9	20.8 to 29.7
L-fold:1							

<sup>\*</sup> Indicates significance at the 10-percent level. - Not applicable. ... Not sufficient data to compute response error measures. 

¹ Demographic subgroups are not reported since the majority of persons reporting are White males.

Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent	in class	Net diffe	rence rate	Index of in	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
P17B3: Was active-duty military service during the Vietnam era (August 1964 to April 1975)?	2,116	-	-	-	-	-	-
Yes	-	32.1	34.1	* <i>-</i> 2.0	−2.6 to −1.3	7.5	6.1 to 9.1
No	-	67.9	65.9	* 2.0	1.3 to 2.6	7.5	6.1 to 9.1
L-fold:1							
Total persons	2,116	-	-	-	-	7.5	6.1 to 9.1
P17B4: Was active-duty military service during February 1955 to July 1964?	2,116	-	-	-	-	-	-
Yes	-	17.0	28.9	<b>* –</b> 11.9	-13.2 to -10.6	34.6	31.5 to 38.1
No	-	83.0	71.1	* 11.9	10.6 to 13.2	34.6	31.5 to 38.1
Total persons	2,116	-	-	-	-	34.6	31.5 to 38.1
P17B5: Was active-duty military service during the Korean conflict (June 1950 to January 1955)	2,116	-	-	-	-	-	-
Yes	-	20.1	21.3	<b>* –</b> 1.2	–1.8 to –0.6	8.2	6.6 to 10.2
No	-	79.9	78.7	* 1.2	0.6 to 1.8	8.2	6.6 to 10.2
L-fold <sup>1</sup> :							
Total persons	2,116	-	-	-	-	8.2	6.6 to 10.2
P17B6: Was active-duty military service during World War II (September 1940 to July 1947)?	2,116	-	-	-	-	_	-
Yes	-	35.4	36.1	* <i>-</i> 0.6	–1.1 to –0.2	3.4	2.6 to 4.5
No	-	64.6	63.9	* 0.6	0.2 to 1.1	3.4	2.6 to 4.5
L-fold: <sup>1</sup>							
Total persons	2,116	-	-	-	-	3.4	2.6 to 4.5
P17B7: Was active-duty military service during World War I (April 1917 to November 1918)?	2,116	_	_	_	_	_	_
Yes	2,110						
No L-fold <sup>1</sup> :	-						
Total persons	2,116						
P17B8: Was active-duty military service during any other time?	2,116	-	-	-	-	-	-
Yes	-	1.3	9.9	* <i>-</i> 8.6	–9.7 to –7.4	93.7	84.4 to 104.3
No	-	98.7	90.1	* 8.6	7.4 to 9.7	93.7	84.4 to 104.3
Total persons	2,116	-	-	-	-	-	84.4 to 104.3

<sup>\*</sup> Indicates significance at the 10-percent level. - Not applicable. ... Not sufficient data to compute response error measures. 

¹ Demographic subgroups are not reported since the majority of persons reporting are White males.

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Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent in o	lass	Net differ	ence rate	Index of ind	onsisten	су
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate		ercent dence iterval
P17C: In total, how many years of active-duty military service has this person had?	1,343	_		_	_	_		_
1 year	_	5.7	6.3	-0.5	-1.7 to 0.6	58.8	49.4 to	. 70 O
2 years	_	25.8	24.6	1.2	-0.5 to 2.9	37.2	33.3 to	
3 years	_	23.7	22.7	1.0	-0.8 to 2.8	44.1	39.8 to	
4 years	_	23.5	22.3	1.1	-0.5 to 2.7	36.1	32.1 to	
5 years	-	4.0	4.9	-0.9	-1.9 to 0.2	62.8	51.7 to	76.2
6 years	-	3.8	3.6	0.1	-0.7 to 1.0	51.9	41.2 to	65.5
7 years	-	1.2	1.3	-0.1	-0.6 to 0.5	58.3	40.0 to	84.8
8 years	-	1.6	1.7	-0.1	-0.7 to 0.6	61.0	44.5 to	83.7
9 years	-							
10 years	-							
11 years	-							
12 years	-							
13 years	-							
14 years	-							
15 years	-							
16 years	-							
17 years	-							
18 years	-							
19 years	-							
20 years	-	2.2	2.3	-0.1	-0.7 to 0.4	30.7	20.9 to	45.1
21 years	-							
22 years	-							
23 years	-							
24 years	-							
25 years	-							
26 years	-							
27 years	-							
28 years	-							
29 years	-							
30 years	-							
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43 years	-							
50 years	_							
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53 years	_							
60 years	_					•		
62 years	_							
63 years	_							
70 years	_							
74 years	_							
88 years	_							
,			***					
L-fold:1		l l	1			I I		

<sup>\*</sup> Indicates significance at the 10-percent level. - Not applicable. ... Not sufficient data to compute response error measures. 

¹ Demographic subgroups are not reported since the majority of persons reporting are White males.

Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent in o	class	Net diffe	rence rate	Index of ind	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interva
P17C: In total, how many years of active-duty military service has this person had? (Collapsed to 5							
categories)	1,343	-	-	-	-	-	
Less than 2 years	-	5.7 25.8	6.3 24.6	-0.5 1.2	-1.7 to 0.6 -0.5 to 2.9	58.8 37.2	49.4 to 70.0 33.3 to 41.6
2 years	_	60.6	58.3	* 2.3	0.6 to 4.0	29.2	26.1 to 32.6
11 to 19 years	_	2.5	3.4	* <b>-</b> 0.9	-1.6 to -0.2	39.6	29.3 to 53.4
20 or more years	_	5.4	7.5	* <i>-</i> 2.1	-2.9 to -1.3	25.8	20.0 to 33.2
L-fold: <sup>1</sup>		5			2.0 10 1.0	20.0	20.0 10 00.1
Total persons	1,343	_	-	-	-	34.8	31.9 to 38.1
P18A: Does this person have a physical, mental, or other health condition that has lasted for 6 or more months and which limits the kind or amount of work this person can do at a job?	15,578	_	_	-	-	-	
Yes	_	8.3	10.3	* <i>-</i> 2.0	−2.4 to −1.7	43.0	40.9 to 45.1
No	_	91.7	89.7	* 2.0	1.7 to 2.4	43.0	40.9 to 45.1
L-fold:		91.7	09.1	^ 2.0	1.7 to 2.4	45.0	40.3 (0 43.)
	45 570	2.0	40.0	. 00	0.41- 4.7	40.0	40.0 (- 45.4
Total persons	15,578	8.3	10.3	* <i>-</i> 2.0	−2.4 to −1.7	43.0	40.9 to 45.1
Male <sup>2</sup>	7,469	9.2	10.9	* <i>-</i> 1.7	−2.2 to −1.2	39.2	36.5 to 42.1
Female <sup>2</sup>	8,036	7.5	9.7	* <i>-</i> 2.2	−2.7 to −1.7	46.9	43.8 to 50.2
White <sup>2</sup>	13,212	8.0	10.1	<b>* -</b> 2.0	−2.4 to −1.6	41.4	39.2 to 43.7
Black <sup>2</sup>	1,352	10.9	14.0	*-3.0	-4.5 to -1.6	48.4	42.5 to 55.1
Other <sup>2</sup>	777	7.7	9.1	-1.4	-3.1 to 0.3	54.2	44.2 to 66.4
Age 15 to 65 <sup>2</sup>	14,928 407	7.9 25.1	9.8 27.8	* <del>-</del> 2.0 -2.7	-2.3 to -1.6 -6.2 to 0.8	42.8 46.1	40.7 to 45.1 38.9 to 55.0
P18B: Does this person have a physical, mental, or other health condition that has lasted for 6 or more months and which prevents this person from working at a job?	1,548	-	-	-	-	-	30.3 to 33.0
Yes	-	39.7	54.6	<b>* –</b> 14.9	-16.9 to -12.8	45.7	42.4 to 49.3
No	-	60.3	45.4	* 14.9	12.8 to 16.9	45.7	42.4 to 49.3
L-fold:							
Total persons	1,548	39.7	54.6	* <i>-</i> 14.9	-16.9 to -12.8	45.7	42.4 to 49.3
Male <sup>2</sup>	787	40.4	54.0	* <i>-</i> 13.6	-16.3 to -10.9	41.8	37.4 to 46.9
Female <sup>2</sup>	752	39.2	55.5	* <b>-</b> 16.2	-19.2 to -13.2	49.4	44.6 to 54.8
White <sup>2</sup>	1,283	38.8	53.8	* -15.0	-17.1 to -12.8	42.3	38.8 to 46.2
Black <sup>2</sup>	177	45.2	59.3	* <del>-</del> 13.0	-20.9 to -7.3	58.8	49.2 to 71.5
Other <sup>2</sup>	69	40.6	56.5	* –14.1 * –15.9	-20.9 to -7.3 -28.3 to -3.4	76.4	61.3 to 99.1
Age 15 to 65 <sup>2</sup>		39.1	53.5	*-15.9 *-14.4	-16.5 to -12.3	45.3	41.9 to 49.2
Age 66+ <sup>2</sup>	1,416 109	49.5	68.8		-16.5 to -12.3 -26.9 to -11.6	45.3	35.0 to 61.4

<sup>\*</sup> Indicates significance at the 10-percent level. - Not applicable. ... Not sufficient data to compute response error measures.

<sup>&</sup>lt;sup>1</sup> Demographic subgroups are not reported since the majority of persons reporting are White males. <sup>2</sup> Results for the category "Yes."

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Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent in	class	Net differ	ence rate	Index of inconsistency	
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interva
P19A: Because of a health condition that has lasted for 6 or more months, does this person have any difficulty going outside the home alone, for example, to shop or visit a doctor's office?	18,417	-	-	-	-	-	
Yes No	-	4.0 96.0	4.0 96.0	0.0	-0.2 to 0.2 -0.2 to 0.2	47.1 47.1	44.2 to 50.2 44.2 to 50.2
	-	96.0	96.0	0.0	-0.2 10 0.2	47.1	44.2 10 50.2
L-fold: Total persons	18,417	4.0	4.0	0.0	-0.2 to 0.2	47.1	44.2 to 50.2
Male <sup>1</sup>	8,596	3.0	3.0	0.0	-0.3 to 0.3	52.2	47.2 to 50.2
Female <sup>1</sup>	9,730	4.9	5.0	0.0	-0.4 to 0.3	44.4	40.9 to 48.2
White <sup>1</sup>	15,764	3.7	3.8	-0.1	-0.4 to 0.1	43.9	40.8 to 47.3
Black <sup>1</sup>	1,549	6.9	6.4	0.5	–0.6 to 1.6	58.2	49.9 to 68.0
Other <sup>1</sup>	830	5.2	3.5	* 1.7	0.4 to 3.0	63.8	49.8 to 81.7
Age 15 to 65 <sup>1</sup>	14,795	2.1	2.1	0.0	-0.2 to 0.2	52.3	47.7 to 57.3
Age 66+ <sup>1</sup>	3,291	12.3	12.3	0.1	–0.9 to 1.0	46.7	42.9 to 50.9
P19B: Because of a health condition that has lasted for 6 or more months, does this person have any difficulty taking care of his or her own personal needs, such as bathing, dressing, or getting around inside the house?	18,131	_	-	-	-	-	
Yes	-	4.2	2.1	* 2.1	1.8 to 2.4	73.6	69.5 to 78.0
NoL-fold:	-	95.8	97.9	* <i>-</i> 2.1	−2.4 to −1.8	73.6	69.5 to 78.0
Total persons	18,131	4.2	2.1	* 2.1	1.8 to 2.4	73.6	69.5 to 78.0
Male <sup>1</sup>	8,444	3.8	2.0	* 1.8	1.4 to 2.2	75.1	68.9 to 82.0
Female <sup>1</sup>	9,596	4.5	2.2	* 2.4	2.0 to 2.7	72.7	67.3 to 78.6
White <sup>1</sup>	15,539	3.4	1.9	* 1.5	1.2 to 1.8	71.6	66.9 to 76.7
Black <sup>1</sup>	1,525	10.1	3.7	* 6.4	5.1 to 7.8	80.5	71.3 to 91.1
Other <sup>1</sup>	801	7.2	2.1	* 5.1	3.5 to 6.7	81.3	65.7 to 100.7
Age 15 to 65 <sup>1</sup>	14,541	2.9	1.4	* 1.6	1.3 to 1.8	78.0	72.4 to 84.1
Age 66+ <sup>1</sup>		9.2	5.1	* 4.1	3.2 to 5.0	70.6	

<sup>\*</sup> Indicates significance at the 10-percent level. - Not applicable. ... Not sufficient data to compute response error measures. 

1 Results for the category "Yes."

JOBNAME: No Job Name PAGE: 18 SESS: 159 OUTPUT: Tue Sep 28 16:23:15 1993 /pssw01/disk2/90dec/cphe/1/tables

Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent in class Net difference rate		rence rate	Index of ind	consistency	
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
P30: Was this person?	11,739	-	-	-	-	-	-
Employee of a PRIVATE FOR PROFIT company or business or of an individual, for wages, salary, or commissions	-	67.2	66.3	* 0.9	0.4 to 1.4	22.6	21.6 to 23.7
Employee of a PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization	_	6.2	6.2	0.0	-0.3 to 0.4	37.3	34.7 to 40.1
Local government employee	-	6.8	6.9	-0.1	-0.4 to 0.2	27.8	25.7 to 30.1
State government employee	_	4.9	5.2	* <i>-</i> 0.3	-0.6 to -0.1	28.7	26.2 to 31.5
Federal government employee	_	3.9	3.9	0.0	-0.2 to 0.1	13.2	11.3 to 15.3
Self-employed in own NOT INCORPOR- ATED business, professional practice,		7.5	8.1	* <i>-</i> 0.7	-1.0 to -0.4	30.5	28.3 to 32.7
or farm	-	7.5	0.1	*-0.7	-1.0 to -0.4	30.5	20.3 10 32.7
business, professional practice, or farm	-	2.9	2.9	0.0	-0.2 to 0.3	45.9	41.8 to 50.4
Working without pay in family business or farm	-	0.6	0.4	0.2	0.0 to 0.3	77.6	65.1 to 92.4
Total persons	11,739	-	-	-	-	27.5	26.5 to 28.5
Male	6,301	-	-	-	-	24.8	23.5 to 26.2
Female	5,391	-	-	-	-	30.6	29.1 to 32.1
White	10,221	-	-	-	-	26.1	25.1 to 27.2
Black	833 533	-		-	-	39.9 33.9	35.9 to 44.5 29.1 to 39.8
	333					33.3	25.1 to 55.0
P30: Was this person? (reinterview recode)	11,806	-	-	-	-	-	-
Employee of a PRIVATE FOR PROFIT company or business or of an individual, for wages, salary, or commissions	-	67.2	66.3	* 0.9	0.4 to 1.4	22.9	21.9 to 24.0
Employee of a PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable							
organization	-	6.3	6.0	0.3	0.0 to 0.6	37.9	35.3 to 40.8
Local government employee	-	6.8	7.3	* <i>-</i> 0.4	–0.7 to –0.1	27.7	25.6 to 30.0
State government employee	-	4.9	5.1	-0.2	-0.5 to 0.0	29.1	26.6 to 31.9
Federal government employee	-	3.8	3.9	-0.1	-0.2 to 0.1	13.4	11.5 to 15.6
Self-employed in own NOT INCORPOR- ATED business, professional practice, or farm		7.4	8.1	± 0.7	-1.0 to -0.4	30.8	28.6 to 33.1
Self-employed in own INCORPORATED	-	7.4	0.1	* <i>-</i> 0.7	-1.0 10 -0.4	30.6	20.0 10 33.1
business, professional practice, or farm	-	2.9	2.9	0.0	-0.2 to 0.3	46.3	42.2 to 50.8
Working without pay in family business or farm	-	0.6	0.4	0.2	0.0 to 0.3	76.2	64.0 to 90.8
L-fold:							
Total persons	11,806	-	-	-	-	27.8	26.8 to 28.8
Male	6,331	-	-	-	-	25.2	23.9 to 26.6
Female	5,428	-	-	-	-	30.7	29.3 to 32.3
White	10,275	-	-	-	-	26.4	25.4 to 27.5
Black	839	-	-	-	-	40.5	36.4 to 45.1
Other	537	-	-	-	-	33.7	28.9 to 39.5

<sup>\*</sup> Indicates significance at the 10-percent level. - Not applicable. ... Not sufficient data to compute response error measures.

JOBNAME: No Job Name PAGE: 19 SESS: 160 OUTPUT: Tue Sep 28 16:23:15 1993 /pssw01/disk2/90dec/cphe/1/tables

Table 4. Summary Measures of Response Error for Population Characteristics Estimated From Response Bias Type Reinterview: 1990 Census—Con.

		Percent in	n class	Net diffe	rence rate	Index of inconsistency	
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
P31A: Last year (1989), did this person work, even for a few days, at a paid job or in a business or							
farm?	15,063	-	-	-	-	-	-
Yes	-	75.4	75.0	0.5	-0.1 to 1.0	45.9	44.6 to 47.3
No	-	24.6	25.0	-0.5	-1.0 to 0.1	45.9	44.6 to 47.3
L-fold:							
Total persons	15,063	75.4	75.0	0.5	–0.1 to 1.0	45.9	44.6 to 47.3
Male <sup>1</sup>	7,602	79.2	79.3	0.0	–0.8 to 0.7	51.3	49.2 to 53.5
Female <sup>1</sup>	7,395	71.7	70.7	* 1.0	0.2 to 1.8	42.3	40.6 to 44.1
White <sup>1</sup>	13,064	75.9	75.6	0.3	–0.3 to 0.9	44.3	42.9 to 45.8
Black <sup>1</sup>	1,147	70.4	69.1	1.3	–1.0 to 3.6	51.9	47.4 to 56.9
Other <sup>1</sup>	652	76.8	74.8	2.0	–1.1 to 5.1	61.5	54.7 to 69.4
P31B: How many weeks did this person work in 1989?	11,337	-	-	-	-	-	-
50-52 weeks	-	67.5	73.6	* <i>-</i> 6.1	-6.8 to -5.4	43.4	42.0 to 44.9
48-49 weeks	_	4.5	2.4	* 2.1	1.7 to 2.5	92.6	87.0 to 98.6
40-47 weeks		8.0	6.0	* 2.0	1.5 to 2.5	72.7	69.2 to 76.5
	-						
27-39 weeks	-	7.0	6.0	* 1.1	0.6 to 1.5	67.7	64.1 to 71.4
14-26 weeks	-	7.2	6.4	* 0.8	0.4 to 1.3	63.1	59.8 to 66.7
1-13 weeks	-	5.7	5.6	0.1	-0.2 to 0.5	47.6	44.4 to 50.9
L-fold:							
Total persons	11,337	-	-	-	-	56.8	55.4 to 58.3
Male	6,097	-	-	-	-	59.3	57.2 to 61.6
Female	5,240	-	-	-	-	55.5	53.7 to 57.5
White	9,993	-	-	-	-	55.0	53.5 to 56.5
Black	819	-	-	-	-	67.3	62.4 to 72.8
Other	525	-	-	-	-	83.3	77.5 to 90.2
P31C: During the weeks WORKED in 1989, how many hours did this person usually work each week? .	11,354		_	_			_
35 hours or more	11,554	80.0	79.7	0.3	-0.2 to 0.8	33.5	32.1 to 35.0
1-34 hours	_	20.0	20.3	-0.3	-0.8 to 0.2	33.5	32.1 to 35.0
L-fold:		20.0	20.0	0.0	0.0 10 0.2	30.0	02.1 10 00.0
Total persons	11,354	-	-	-	-	33.5	32.1 to 35.0
Male	6,084	-	-	-	-	41.0	38.2 to 44.1
Female	5,270	-	-	-	-	31.6	29.8 to 33.5
White	10,004	-	-	-	-	32.5	30.9 to 34.0
BlackOther	822 528	-	-	-	-	43.7 39.9	37.9 to 50.6 32.7 to 49.0
P31C: During the weeks WORKED in 1989, how many hours did this person usually work each week?	11,354			-	-	39.9	32.7 10 49.0
35 hours or more	11,004	80.0	79.7	0.3	-0.2 to 0.8	33.5	32.1 to 35.0
15-34 hours	-	16.2	16.5	-0.4	-0.2 to 0.8 -0.9 to 0.2	41.7	39.9 to 43.5
1-14 hours	-	3.8	3.8	0.1	-0.3 to 0.4	63.3	58.9 to 68.0
L-fold:		5.0	3.3	5.1		55.5	2 2 2 2 20.0
Total persons	11,354					40.1	38.6 to 41.7
Male	6,084	- [	-			47.7	44.9 to 50.7
Female	5,270	-	-	-	-	38.2	36.4 to 40.2
White	10,004	-	-	-	-	39.3	37.7 to 41.0
Black	822	-	-	-	-	48.6	42.6 to 55.6
Other	528	-	-	-	-	44.7	37.2 to 54.0

<sup>\*</sup> Indicates significance at the 10-percent level.

1 Results for the category "Yes."

Not applicable.

<sup>...</sup> Not sufficient data to compute response error measures.

## APPENDIX A.

## Facsimiles of the Content Reinterview Questionnaire and the 1990 Census of the United States With Respondent Instructions

					OMB No.	0607-068	O: Approva	Expires 06/30/9
U.S. Code). By the	nse to this inquiry <b>is requ</b> e same law, your report to	the Census Bureau is	Se	ection I	– IDE	NTIF	ICATI	ON
confidential. It may be used only for FORM <b>D-1010</b> (7-25-90)	ay be seen only by sworn or statistical purposes. U.S. DI	Census employees and  EPARTMENT OF COMMERCE BUREAU OF THE CENSUS	Person No.	it ID	ARA	Block	Map spot	Reference date
F	CONTENT REINTERVIE	1						
QL	JESTIONNA	AIRE	Address					
21st De	cennial Censu	ıs — 1990	City Telephone nu	mber		Sta	ate	ZIP Code
Name of interviewe	er	Code	Comments					
Date	Se	ction II — REC	ORD OF	CONTA	CTS			
Mark (X) ONE to the complete	interview 5 crview 6 crview 7 crview 7	Section III —  Temporarily absent Refused Vacant Demolished	FINAL S	Explain				
Bureau. This is n survey to evalua April.  I would like to sy name this home such person is av. Repeat the above household memberschedule a callbact have a few quetousehold. Did y give respondent at a. What is your Verify agains necessary, verthe sample unit — END III.  b. Is there any.  April 1, 199  1  Yes — C 2  No — EN 3  Don't kn c. What is your	ny identification (PAI te the data we collect the data we collect peak with a househol is owned, being bous allable, start with any introduction for the neers are present, ask 1 ack in Section II.) stions I would like to you receive our introduction copy of the letter.) rexact address? It the label that this is the rify both the address and — continue with 1 bnTERVIEW and find the cone living here now yor continue with 1 conti	in from the U.S. Census USE). We are doing a ted in the census last lid member in whose ght, or rented. (If no edult household member. ew respondent. If no adult to verify the address and lask of you and your ductory letter? (If not, the correct sample unit. If and the roster. If this is of the sample e correct unit. who was living here on emplete Section III.	Is the	e name listed Yes — Deter Section asking colum respon Item l curren No — Ask to listed of introdu conting respon respon the lab	mine whe on IV still g 1d and ns 1 – 5. ndent wit sin the ap nt respon speak wi on the lab uction for ue as insti se to Che	other EAC lives here I e for eac Mark 1d hout ask propriate dent. th any oti el. If nece the new ructed ab ck Item A one of thi	EH person li e and their a ch person li and 1e for ing. Then g e column fo	isted in age by sted in the current to to Check or the erron eat the the the current was a second to the current to the

Section IV — HOUSEHOLD	PERSON 1	PERSON 2		
ROSTER	Last name Person No. from label	Last name Person No. from label		
Transcribe the person names from the label in person number order to the columns at the right.	First name Middle initial	First name Middle initial		
1d. Doesstill live here?  If NONE of the persons live here, END INTERVIEW and complete Sections II and III.	1 ☐ Still lives here — <i>Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — <i>Skip to next person</i>	1 ☐ Still lives here — <i>Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — <i>Skip to next person</i>		
e. Is under 15 years of age?  If "Don't know," say —  Please give me your best estimate.	1 ☐ Yes Go to 1d for next person listed. If all complete, skip to Check Item B.	1 Yes Go to 1d for next person listed. If all complete, skip to Check Item B.		
CHECK ITEM B  Continue in the appropriate column for the current respondent. Mark (X) ONE box to indicate the status of the respondent.	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3		
2. Is male or female?	1 ☐ Male 2 ☐ Female	1 ☐ Male 2 ☐ Female		
3a. How old is ?	Age	Age		
If "Don't know," say — Please give me your best estimate.				
b. In what year was born?	Year 1	Year 1		
4. If the respondent is Person 1, skip to 5a. Otherwise, refer to 1d, Person 1.		If a RELATIVE of Person 1:		
If Person 1 still lives here, ask — <b>How is related to</b> (Person 1) <b>?</b>		01 ☐ Husband/wife 02 ☐ Natural-born or adopted son/daughter		
If Person 1 does NOT live here, ask — How was related to (Person 1)?		03 ☐ Stepson/stepdaughter 04 ☐ Brother/sister 05 ☐ Father/mother		
Mark (X) ONE box for each person.		06 ☐ Grandchild		
If "Other relative" of person in column 1, mark box and print exact relationship, such as motherin-law, grandparent, son-in-law, niece, cousin, and so on.		07 ☐ Other relative 7		
		If NOT RELATED to Person 1:  08 ☐ Roomer, boarder, or foster child  09 ☐ Housemate, roommate  10 ☐ Unmarried partner  11 ☐ Other nonrelative		
5a. What is 's race? For example, White, Black or Negro, Eskimo, Aleut, American Indian, or an Asian or Pacific Islander group such as Chinese, Filipino, Hawaiian, Korean, Vietnamese, Japanese, Asian Indian, Samoan, Guamanian, and so on.  Mark (X) ONE box for the race that the person considers himself/herself to be.  If response is African-American, Afro-American, Haitian, Jamaican, West Indian, Nigerian, and so on, mark the "Black or Negro" box and skip to 6.	01 ☐ White 02 ☐ Black or Negro 03 ☐ Eskimo 04 ☐ Aleut 05 ☐ American Indian — Skip to 5c	01 ☐ White 02 ☐ Black or Negro 03 ☐ Eskimo 04 ☐ Aleut 05 ☐ American Indian — Skip to 5c		
If response is an "Other API" group such as Burmese, Fijian, Sri Lankan, and so on, mark the "Other API" box, print the name of the group and skip to 6. If a multiple response is given in 5a for "Other API," print the names of the groups and continue with 5b.  If response is "Other race," mark the "Other race" box, print the name of the race and skip to 6. If a multiple response is given in 5a for "Other race," print the names of the groups and continue with 5b.	Asian or Pacific Islander (API)  06	Asian or Pacific Islander (API)  06		

PERSON 3	PERSON 4	PERSON 5
Last name Person No. from label	Last name Person No. from label	Last name Person No. from label
First name Middle initial	First name Middle initial	First name Middle initial
1 ☐ Still lives here — <i>Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — <i>Skip to next person</i>	1 ☐ Still lives here — Ask 1e 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — Skip to next person	1 ☐ Still lives here — Ask 1e 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — Skip to next person
1 ☐ Yes 2 ☐ No 3 Go to 1d for next person listed. If all complete, skip to Check Item B.	1  Yes Go to 1d for next person listed. If all complete, skip to Check Item B.	1  Yes Go to 1d for next person listed. If all complete, skip to Check Item B.
1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3
1 ☐ Male 2 ☐ Female	1 Male 2 Female	1 Male 2 Female
Age	Age	Age
Year 1	Year 1	Year 1
If a RELATIVE of Person 1:  o1  Husband/wife  o2  Natural-born or adopted son/daughter  o3  Stepson/stepdaughter  o4  Brother/sister  o5  Father/mother  o6  Grandchild  o7  Other relative  If NOT RELATED to Person 1:  o8  Roomer, boarder, or foster child  o9  Housemate, roommate  10  Unmarried partner  11  Other nonrelative	If a RELATIVE of Person 1:  01  Husband/wife 02  Natural-born or adopted son/daughter 03  Stepson/stepdaughter 04  Brother/sister 05  Father/mother 06  Grandchild 07  Other relative  If NOT RELATED to Person 1: 08  Roomer, boarder, or foster child 09  Housemate, roommate 10  Unmarried partner 11  Other nonrelative	If a RELATIVE of Person 1:  01 ☐ Husband/wife 02 ☐ Natural-born or adopted son/daughter 03 ☐ Stepson/stepdaughter 04 ☐ Brother/sister 05 ☐ Father/mother 06 ☐ Grandchild 07 ☐ Other relative  If NOT RELATED to Person 1:  08 ☐ Roomer, boarder, or foster child 09 ☐ Housemate, roommate 10 ☐ Unmarried partner 11 ☐ Other nonrelative
01  White 02  Black or Negro 03  Eskimo 04  Aleut 05  American Indian — Skip to 5c  Asian or Pacific Islander (API) 06  Chinese  15  Thai 07  Filipino  16  Cambodian 08  Hawaiian  17  Laotian 09  Korean  18  Pakistani 10  Vietnamese  19  Hmong 11  Japanese  20  Tongan 12  Asian Indian  21  Other API — Print group(s) 14  Guamanian  22  Other race — Print group(s)	01	01  White 02  Black or Negro 03  Eskimo 04  Aleut 05  American Indian — Skip to 5c  Asian or Pacific Islander (API) 06  Chinese  15  Thai 07  Filipino  16  Cambodian 08  Hawaiian  17  Laotian 09  Korean  18  Pakistani 10  Vietnamese  19  Hmong 11  Japanese  20  Tongan 12  Asian Indian  21  Other API — Print group(s) 14  Guamanian  22  Other race — Print group(s)

Section IV — HOUSEHOLD	PERSON 1	PERSON 2		
ROSTER	Last name Person No. from label	Last name Person No. from label		
Transcribe the person names from the label in person number order to the columns at the right.	First name Middle initial	First name Middle initial		
1d. Doesstill live here?  If NONE of the persons live here, END INTERVIEW and complete Sections II and III.	1 ☐ Still lives here — <i>Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — <i>Skip to next person</i>	1 ☐ Still lives here — <i>Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — <i>Skip to next person</i>		
e. Is under 15 years of age?  If "Don't know," say —  Please give me your best estimate.	1 ☐ Yes 2 ☐ No Isted. If all complete, skip to Check Item B.	1 Yes Go to 1d for next person listed. If all complete, skip to Check Item B.		
CHECK ITEM B				
Continue in the appropriate column for the current respondent. Mark (X) ONE box to indicate the status of the respondent.	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3		
2. Is male or female?	1 ☐ Male 2 ☐ Female	1 ☐ Male 2 ☐ Female		
3a. How old is ?	Age	Age		
If "Don't know," say — Please give me your best estimate.	201 10 10 10 10 10 10 10 10 10 10 10 10 1	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
<b>5b.</b> If "Other API" OR "Other race" is a multiple response, ask —	Print ONE group 7	Print ONE group 🕌		
reported more than one Asian or	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
Pacific Islander/racial group; with which one of these groups does most closely identify?	Skip to 6	Skip to 6		
c. If respondent answers ''American Indian'' in question 5a, ask —	Print name of enrolled or principal tribe	Print name of enrolled or principal tribe		
What is the name of's enrolled or principal tribe?				
	1 ☐ Not enrolled in a tribe	1 ☐ Not enrolled in a tribe		
	2 ☐ Don't have a principal tribe 3 ☐ Don't know the name of the tribe	2 ☐ Don't have a principal tribe 3 ☐ Don't know the name of the tribe		
If a single response or a multiple response is given in 5c, for the first tribe reported, ask —	1 ☐ Yes, enrolled tribe	1 ☐ Yes, enrolled tribe		
d. Is the (Read tribe entered in 5c) tribe 's enrolled tribe or 's principal tribal affiliation?	2 ☐ Yes, principal tribal affiliation 3 ☐ No	2 ☐ Yes, principal tribal affiliation 3 ☐ No		
If multiple response in 5c, continue with 5e below. Otherwise, skip to 6.	1 ☐ Yes, enrolled tribe	1  Yes, enrolled tribe		
e. Is the (Read second tribe entered in 5c) tribe 's enrolled tribe or 's principal tribal affiliation?	2 Yes, principal tribal affiliation 3 No	2 ☐ Yes, principal tribal affiliation 3 ☐ No		
6. Is now married, widowed, divorced, separated, or has never been married?	1 ☐ Now married 4 ☐ Separated 2 ☐ Widowed 5 ☐ Never married	1 ☐ Now married 4 ☐ Separated 2 ☐ Widowed 5 ☐ Never married		
Mark (X) ONE box for each person.	3 ☐ Divorced	3 ☐ Divorced		
7a. Is of Spanish/Hispanic origin? For example: Mexican, Mexican-American, Chicano, Puerto Rican, Cuban, Spaniard, or from the Spanish-speaking countries of Central or South America.  If "Yes," ask — With which Spanish/Hispanic group does identify?  If "Other Spanish/Hispanic," mark the appropriate box and print no more than	1 No (not Spanish/Hispanic) 2 Yes, Mexican, Mexican-American, Chicano 3 Yes, Puerto Rican 4 Yes, Cuban 5 Yes, other Spanish/Hispanic — Print group, for example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.	1 No (not Spanish/Hispanic) 2 Yes, Mexican, Mexican-American, Chicano 3 Yes, Puerto Rican 4 Yes, Cuban 5 Yes, other Spanish/Hispanic — Print group, for example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.		
two groups in the space provided.				
	If a single group is given, skip to 8a. For two or more groups, continue with 7b.	If a single group is given, skip to 8a. For two or more groups, continue with 7b.		
b reported more than one group in the "Yes, other Spanish/Hispanic"	Print ONE group	Print ONE group 📆		
category; with which one of these				
groups does most closely identify?				

PERSON 3		PERSON 4	-	PERSON 5		
Last name Person N from labe		Last name	Person No. from label	Last name	Person No. from label	
First name Middle	initial	First name	Middle initial	First name	Middle initial	
□ Still lives here — Ask 1e     □ No longer lives here (Moved, dea unknown, etc.) — Skip to next p.		1 ☐ Still lives here — <i>Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — <i>Skip to next person</i>		□ Still lives here — Ask 1e     □ No longer lives here (Moved, dead, unknown, etc.) — Skip to next persor		
1 Yes Go to 1d for next person listed. If all complete, skip to Check Item B.		1  Yes Go to 1d for nex 2  No listed. If all com to Check Item B	kt person plete, skip	1 Yes Go to 1d for listed. If all of to Check Itel	omplete, skip	
1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3		1 ☐ Self response 2 ☐ Proxy — Print proxy's person numbe	er → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy person nui		
1 ☐ Male 2 ☐ Female		1 ☐ Male 2 ☐ Fe	emale	1 ☐ Male 2 ☐	] Female	
Age		Age		Age		
Print ONE group		Print ONE group		Print ONE group	6	
Print name of enrolled or principal trid	ip	Print name of enrolled or print name of enrolled in a tribe  1	ribe Skip	Print name of enrolled of the print name of enrolled of the princip and princip and princip and princip the tribe	e al tribe	
1 ☐ Yes, enrolled tribe 2 ☐ Yes, principal tribal affiliation 3 ☐ No		1 ☐ Yes, enrolled tribe 2 ☐ Yes, principal tribal affil 3 ☐ No	iation	1 ☐ Yes, enrolled tribe 2 ☐ Yes, principal tribal a 3 ☐ No	affiliation	
1 ☐ Yes, enrolled tribe 2 ☐ Yes, principal tribal affiliation 3 ☐ No		1 ☐ Yes, enrolled tribe 2 ☐ Yes, principal tribal affil 3 ☐ No	iation	1 ☐ Yes, enrolled tribe 2 ☐ Yes, principal tribal a 3 ☐ No	affiliation	
1  Now married 4  Separated 2  Widowed 5 Never marrie 3  Divorced	ed		parated ever married		Separated Never married	
Yes, Puerto Rican	For	1 No (not Spanish/Hispan 2 Yes, Mexican, Mexican-American, C 3 Yes, Puerto Rican 4 Yes, Cuban 5 Yes, other Spanish/Hisp Print group, for example: Colombian, Dominican, I Salvadoran, Spaniard, an	banic — Argentinean, Vicaraguan, d so on.	1 No (not Spanish/Hist 2 Yes, Mexican, Mexican-American 3 Yes, Puerto Rican 4 Yes, Cuban 5 Yes, other Spanish/h Print group, for exam Colombian, Dominica Salvadoran, Spaniard  If a single group is give two or more groups, or	Skip to 8a  Hispanic — ple: Argentinean, n, Nicaraguan, , and so on.	
Print ONE group 7		Print ONE group		Print ONE group	Page 5	

Section IV — HOUSEHOLD	PERSON 1	PERSON 2		
ROSTER	Last name Person No.	Last name Person No.		
Transcribe the person names from the label in person number order to the columns at the right.	First name Middle initial	First name Middle initial		
1d. Doesstill live here?  If NONE of the persons live here, END INTERVIEW and complete Sections II and III.	1 ☐ Still lives here — <i>Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — <i>Skip to next person</i>	1 ☐ Still lives here — <i>Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — <i>Skip to next person</i>		
e. Is under 15 years of age?  If "Don't know," say —  Please give me your best estimate.	1 ☐ Yes 2 ☐ No Iisted. If all complete, skip to Check Item B.	1 ☐ Yes 2 ☐ No Iisted. If all complete, skip to Check Item B.		
CHECK ITEM B				
Continue in the appropriate column for the current respondent. Mark (X) ONE box to indicate the status of the respondent.	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3		
2. Ismale or female?	1 ☐ Male 2 ☐ Female	1 ☐ Male 2 ☐ Female		
3a. How old is ?	Age	Age		
If "Don't know," say — Please give me your best estimate.		Control Cont		
8a. In what U.S. State or foreign country was born? If born in a hospital, give location of the hospital.	Print the name of the State or foreign country; or Puerto Rico, Guam, etc.	Print the name of the State or foreign country; or Puerto Rico, Guam, etc.		
b. When was born in (Read entry in 8a) was 's mother living in a different State or foreign country?	1 ☐ Yes — Continue with 8c 2 ☐ No, same State/country 3 ☐ Don't know  Skip to 9	1 ☐ Yes — Continue with 8c 2 ☐ No, same State/country 3 ☐ Don't know  Skip to 9		
c. Where did's mother live at the time of's birth?	Print the name of the State or foreign country; or Puerto Rico, Guam, etc.	Print the name of the State or foreign country; or Puerto Rico, Guam, etc.		
9. If the answer to question 8a corresponds to one of the first two "Yes" categories listed, mark the appropriate "Yes" category. Otherwise, ask —  a. Is a CITIZEN of the United States? That is, does have at least one American parent or is a citizen by naturalization?	1 ☐ Yes, born in the	1 ☐ Yes, born in the		
b. In what month and year did receive final naturalization papers?	Month Year  1 Did not receive final naturalization papers	Month Year  1 Did not receive final naturalization papers		
c. Ask of all persons not born in the U.S. In what month and year did come to the United States to stay?	Month Year	Month Year		

PERSON 3		PERSON	4	PERSON 5		
Last name	Person No. from label	Last name	Person No. from label	Last name	Person No. from label	
First name	Middle initial	First name	Middle initial	First name	Middle initial	
1 ☐ Still lives here — Ask 10 2 ☐ No longer lives here (Mounknown, etc.) — Skip	oved, dead,	1 ☐ Still lives here — Asi 2 ☐ No longer lives here unknown, etc.) — S	(Moved, dead, kip to next person	1 ☐ Still lives here — <i>Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — <i>Skip to next person</i>		
1  Yes Go to 1d for next listed. If all come to Check Item B	rt person plete, skip 	1 ☐ Yes  Go to 1d for I 2 ☐ No  listed. If all co to Check Iter	next person omplete, skip n B.	1  Yes Go to 1d for r 2 No listed. If all co to Check Item	next person omplete, skip n B.	
1 ☐ Self response 2 ☐ Proxy — Print proxy's person number	er → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy person num		1 ☐ Self response 2 ☐ Proxy — Print proxy person nurr	's aber → 3	
1 ☐ Male 2 ☐ Fe	emale	1 ☐ Male 2 ☐	Female		Female	
Age		Age		Age		
Print the name of the State country; or Puerto Rico, Gu	e or foreign Jam, etc.	Print the name of the St country; or Puerto Rico,	ate or foreign Guam, etc.	Print the name of the Sta country; or Puerto Rico,	ate or foreign Guam, etc.	
1 ☐ Yes — Continue with 8 2 ☐ No, same State/country 3 ☐ Don't know	Skip to 9	1 ☐ Yes — <i>Continue wit</i> 2 ☐ No, same State/cou 3 ☐ Don't know		1 ☐ Yes — <i>Continue with</i> 2 ☐ No, same State/cour 3 ☐ Don't know		
Print the name of the State country; or Puerto Rico, Gu	or foreign uam, etc.	Print the name of the St country; or Puerto Rico,	ate or foreign Guam, etc. ア	Print the name of the Sta country; or Puerto Rico,	ate or foreign Guam, etc.	
1 ☐ Yes, born in the	o, Guam, s, or <i>Skip to 9c</i> nerican parent <i>9c</i> curalization —	1 ☐ Yes, born in the	Rico, Guam, nds, or — <i>Skip to 9c</i> American parent <i>to 9c</i> naturalization — he United	1 ☐ Yes, born in the	ico, Guam, Ids, or — <i>Skip to 9c</i> American parent <i>o 9c</i> naturalization —	
Month Year  1 □ Did not receive final naturalization papers		Month Year  1 Did not receive final naturalization papers		Month Year  1 Did not receive final naturalization papers		
Month Year		Month Year 1		Month Year		

Section IV — HOUSEHOLD	PERSON 1	PERSON 2				
ROSTER	Last name	Person No. from label	Last name		Person No. from label	
Transcribe the person names from the label in person number order to the columns at the right.	First name	Middle initial	First name		Middle initial	
1d. Doesstill live here?  If NONE of the persons live here, END INTERVIEW and complete Sections II and III.	1 ☐ Still lives here — Ask 16 2 ☐ No longer lives here (Mounknown, etc.) — Skip	oved, dead,	1 ☐ Still lives here — <i>Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — <i>Skip to next person</i>			
e. Is under 15 years of age?  If "Don't know," say —  Please give me your best estimate.	1 Yes Go to 1d for nex. 2 No listed. If all comp	t person olete, skip	¹☐ Yes ²☐ No lis	o to 1d for nex sted. If all com o Check Item B	kt person plete, skip	
CHECK ITEM B  Continue in the appropriate column for the	1 Self response		ı ☐ Self resp			
current respondent. Mark (X) ONE box to indicate the status of the respondent.	2 Proxy — Print proxy's person number		2 ☐ Proxy — Print proxy's person number → 3			
2. Ismale or female?	1 ☐ Male 2 ☐ Fe	male	ı □ Male	2 ∐ F∈	emale	
3a. How old is ?  If "Don't know," say — Please give me your best estimate.	Age		Age			
10. At any time from February 1, 1990 to April 1, 1990, did attend regular school or college? Include only nursery school, kindergarten, elementary school, and schooling which leads to a high school diploma or college degree.	1 ☐ No, did not attend during 2 ☐ Yes, public school, publ 3 ☐ Yes, private school, priv	ic college	1 ☐ No, did not attend during this period 2 ☐ Yes, public school, public college 3 ☐ Yes, private school, private college			
If "Yes," ask — Public or private?						
11. As of April 1, 1990, what was the highest grade (or year) of regular school had ever ATTENDED?	40 Never attended school - Skip to Check Item C 41 Nursery school	_	40 ☐ Never att Skip to 41 ☐ Nursery s	Check Item C	_	
If did attend school at any time from February 1, 1990 to April 1, 1990, mark (X) ONE box for the grade attended during this period.	42 Kindergarten  Elementary or High School (Gi	rade)	42 Kinderga	rten	irade)	
If high school was finished by an equivalency test (GED) and did not attend college, mark (X) ''12.''	1 2 3 4 01 02 03 04	5 6	1 2	3 4	5 6	
	7 8 9 10 07 08 09 10	11 12	7 8	9 10	11 12	
	College (Academic year)  1 2 3 4 5 6  C1 C2 C3 C4 C5 C6	9 or 7 8 more	College (Acade  1 2 3	mic year)  4 5 6	9 or 7 8 more	
12. As of April 1, 1990, had finished the highest grade (or year)	1 ☐ No, was attending this g 2 ☐ No, had not finished this				grade (or year) s grade (or year)	
attended?	3 Yes, had finished this gr			finished this g		
CHECK ITEM C	1 Age is less than 15 year.	s — Skip to 14a	1 ☐ Age is les	ss than 15 year	rs — Skip to 14a	
Refer to age (question 3a) and highest grade attended (question 11).	Age is 15 years or older	and	_	years or older	and	
	2 Highest grade attend seventh grade or less	s — Skip to 13c	2  Highest grade attended is the seventh grade or less — Skip to 13 3  Highest grade attended is eighth grade or higher — Continue with 13a			
	3 ☐ Highest grade attende grade or higher — Cor					
13a. As of April 1, 1990, how much school had COMPLETED?	□ Less than a high school or diploma	ol degree	1 Less that or diplo	n a high scho	ol degree	
Read each category and mark (X) ONE box for the highest level	2 High school graduate equivalent (For exam		2 ☐ High sch	ool graduate ent (For exam	or the	
COMPLETED or degree RECEIVED.  Mark "Other" and print the degree	3 ☐ Some college but no de	egree	³ ☐ Some co	llege but no d	legree	
only if respondent cannot choose a category.	4 ☐ Associate degree in co 5 ☐ Bachelor's degree	•	5 🔲 Bachelo		_	
odiogory:	(For example: BA, A			ample: BA, A degree (For ex		
	MS, MEng, MEd, MSV		MS, ME	ing, MEd, MS onal school de	W, MBA)	
	example: MD, DDS, i 8 Doctorate degree (For	OVM, LLB, JD)	example	e: MD, DDS, te degree (Foi	DVM, LLB, JD)	
	PhD, EdD) 9 Cher - Specify Z	oxup.o.	PhD, E	dD)		
	) Specify y			-poon'y 7		
	If Associate degree, continu Otherwise, skip to 13c.	ue with 13b.	If Associate of Otherwise, s	degree, contin kip to 13c.	ue with 13b.	
b. Was this Associate degree in an occupational program or in an academic program?	1 ☐ Occupational program 2 ☐ Academic program		1 ☐ Occupation 2 ☐ Academic			
<sup>C</sup> Did complete high school by graduating, or by taking an	1 Graduated from high sch	nool		d from high sc		
equivalency test of some kind (for example, a GED exam)?	2  Took GED or equivalent 3 Did not complete high so	chool		O or equivalent omplete high s		

PERSON 3			PERSON 4		PERSON 5		
Last name Person from lat		Last name		Person No. from label	Last name		Person No. from label
First name Midd	le initial	First name		Middle initial	First name		Middle initial
1 ☐ Still lives here — Ask 1e 2 ☐ No longer lives here (Moved, de unknown, etc.) — Skip to next		2 No longe	s here — <i>Ask 1e</i> er lives here (Mo n, etc.) — <i>Skip</i>	oved, dead,	2 🗆 No lo	ives here — <i>Ask i</i> nger lives here (N own, etc.) — <i>Ski</i> j	loved, dead,
1  Yes Go to 1d for next person listed. If all complete, sk to Check Item B.	ip	1 2 No 2 1	Go to 1d for nex isted. If all comp o Check Item B.	olete, skip	1 🗆 Yes } 2 🗆 No	Go to 1d for ne listed. If all con to Check Item I	nplete, skip
1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3		1 ☐ Self resp 2 ☐ Proxy —	oonse Print proxy's person numbe	r → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3		
1 Male 2 Female		ı ☐ Male	2 ☐ Fe	male	1 🗌 Male	2 🗆 F	emale
Age		Age			Age		
□ No, did not attend during this per     □ Yes, public school, public colleg     □ Yes, private school, private collegen	е	2 Yes, pub	not attend durin blic school, publ vate school, priv	ic college	2 🔲 Yes, 1	id not attend duri public school, pul private school, pr	blic college
40 ☐ Never attended school — Skip to Check Item C 41 ☐ Nursery school 42 ☐ Kindergarten		40 Never at Skip to 41 Nursery 42 Kinderga			40 ☐ Never Skip 41 ☐ Nurse 42 ☐ Kinde		!-
Elementary or High School (Grade)		Elementary or	High School (G	rade)	Elementary	or High School (C	Grade)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6 □ 06	1 2	3 4	5 6	1 2 01 0		5 6
7 8 9 10 11 07 08 09 10 11	12 	7 8	9 10	11 12	7 8 		11 12
College (Academic year)  1 2 3 4 5 6 7 8  C1 C2 C3 C4 C5 C6 C7 C8	9 or more C9	College (Acad	emic year)  4 5 6	9 or 7 8 more C7 C8 C9	College (Ac	ademic year) 3	9 or 7 8 more 
1 ☐ No, was attending this grade (or 2 ☐ No, had not finished this grade (or 3 ☐ Yes, had finished this grade (or y	or year)	2 ☐ No, had ı	attending this g not finished this finished this gr	grade (or year)	2 🔲 No, h	vas attending this ad not finished th nad finished this g	is grade (or year)
1 ☐ Age is less than 15 years — Skip	to	1 ☐ Age is le	ss than 15 year	s — Skip to	1 ☐ Age is	s less than 15 yea	ars — Skip to
14a Age is 15 years or older and		Age is 1:	5 years or older	14a and	Age is	s 15 years or olde	14à er and
2 ☐ Highest grade attended is the seventh grade or less — Skip 3 ☐ Highest grade attended is eigh grade or higher — Continue wi	to 13c h	seve 3 ☐ High	nest grade attend enth grade or les est grade attende e or higher — Col	s — Skip to 13c ed is eighth	з □ <i>В</i>	lighest grade atter eventh grade or le lighest grade attend rade or higher — Co	ss — Skip to 13c ded is eighth
1 Less than a high school degre	Э	1 🗆 Less tha	n a high schoo	ol degree		than a high scho	ool degree
or diploma 2 ☐ High school graduate or the			hool graduate		2 ☐ High	iploma school graduate	
equivalent (For example: Gl	ED)		lent (For exam ollege but no d	-		ivalent (For exar college but no	-
4 Associate degree in college		4 ☐ Associa	te degree in co	•	4 🔲 Assoc	ciate degree in d	_
5 L Bachelor's degree (For example: BA, AB, BS)			ample: BA, A		5 □ Bache (For	elor's degree · example: BA, ,	AB, BS)
6 Master's degree (For example: MS, MEng, MEd, MSW, MBA			degree (For ex Eng, MEd, MS\		6	er's degree (For e MEng, MEd, MS	xample: MA, SW, MBA)
7 Professional school degree (Forexample: MD, DDS, DVM, LL	B. JD)		onal school deg e: MD, DDS, I			ssional school denple: MD, DDS,	
8 Doctorate degree (For example		8 Doctora	te degree (For		8 🗆 Docto	orate degree (Fo	
PhD, EdD) 9 ☐ Other — Specify 7		PhD, E 9 ☐ Other —				) <b>, EdD)</b> r — Specify <sub>Z</sub>	
			*			,	
If Associate degree, continue with Otherwise, skip to 13c.	3b.	Otherwise,		ue with 13b.	If Associa Otherwis	ate degree, contine, skip to 13c.	nue with 13b.
1 ☐ Occupational program 2 ☐ Academic program		1 ☐ Occupati 2 ☐ Academi	ional program c program			pational program emic program	
1 ☐ Graduated from high school 2 ☐ Took GED or equivalent 3 ☐ Did not complete high school		2 🔲 Took GE	ed from high sch D or equivalent omplete high sc		2 🔲 Took	ated from high so GED or equivalen ot complete high s	t
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Se	ction IV —	HOUSEHOLD	PERSON 1		PERSON 2			
		ROSTER	Last name	Person No. from label	Last name		Person No. from label	
th	anscribe the pe label in persection at	person names from son number order to the right.	First name	Middle initial	First name		Middle initial	
		live here? e persons live here, END and complete Sections II	1 ☐ Still lives here — Ask 1 2 ☐ No longer lives here (M unknown, etc.) — Skip	oved, dead, to next person	2 🗌 No Ior unkno	1 ☐ Still lives here <i>— Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) <i>— Skip to next person</i>		
1	lf ''Don't kno	15 years of age? ow,'' say — me your best estimate.	1 Yes Go to 1d for nex 2 No listed. If all com to Check Item B	t person plete, skip	1 □ Yes 2 □ No	Go to 1d for no listed. If all co to Check Item	ext person mplete, skip B.	
CH Cd	ECK ITEM ontinue in the errent respond	appropriate column for the dent. Mark (X) ONE box to	1 ☐ Self response 2 ☐ Proxy — Print proxy's			1 ☐ Self response 2 ☐ Proxy — Print proxy's		
	licate the sta	tus of the respondent. or female?	person numbe		1 ☐ Male	person num	<i>ber</i> → 3∟	
3a.	How old is .	?	Age		Age			
	lf ''Don't kno Please give ı	ow,″ say — me your best estimate.						
140	Whatie	's ancestry or ethnic						
144	origin? And or descent,	cestry means ethnic origin , ''roots,'' or heritage.	Print group(s)		Print group	<u>(s)</u> 7		
	Afro-Amer., Dominican, French Cana Lebanese, N	e: German, Italian, . Croatian, Cape Verdean, Ecuadoran, Haitian, Cajun, adian, Jamaican, Korean, Mexican, Nigerian, Irish, ak, Taiwanese, Thai, ttc.	If response is a single ancestry know, skip to 15. If a multiple response is given, with 14b.		If response is a single ancestry or don't know, skip to 15.  If a multiple response is given, continue with 14b.		•	
b	with which	or more groups reported, one of these groups ost closely identify?	Print ONE group		Print ONE group			
15.	were born i would like	le have ancestors who in other countries. I to ask you about the n which 's ancestors	Ancestor  Your father	Country		Ancestor Your father	Country	
a	were born In what co	untry were the following	Father's father			Father's father		
	ancestors of born?	on 's father's side	Father's mother			Father's mother		
			Earlier generations on your father's side			Earlier generations on your father's side		
Ь		untry were the following on 's mother's side	Your mother			Your mother		
			Mother's father			Mother's father		
			Mother's mother			Mother's mother		
			Earlier generations on your mother's side			Earlier generations on your mother's side		
СН	Refer to que	Destions 15a and 15b.	1 All responses to 15a and "USA," "U.S. State,	" or "Don't	"US	1 ☐ All responses to 15a and 15b indicate "USA," "U.S. State," or "Don't		
			Check Item F Check Item		nse of only one o A'' in 15a and 15 k Item F nse of two or n r than ''USA'' i	country other than 5b — Skip to		
16.	me about h don't know your ances	ncestors you have told lave been American (or r). In what country were tors who FIRST came to States born?	Print (country/countries)		7			
CH	ECK ITEM	E	1  Single, specific country	, or don't		, specific coun		
	Refer to que	estion 16.	know — Skip to Chec 2  More than one country	k Item F	knov	v — Skip to Che than one count	eck Item F	
17.		of the countries you est describes's	Print country		Print count	ry 7		
	-	, read responses in 15a,						

PERSON 3		PERSON 4		PERSON 5			
Last name	Person No. from label	Last name		Person No. from label	Last name		Person No. from label
First name	Middle initial	First name		Middle initial	First name		Middle initial
1 ☐ Still lives here — Ask 2 ☐ No longer lives here ( unknown, etc.) — Sk	Moved, dead, sip to next person	2 🗌 No lor		k 1e (Moved, dead, kip to next person	2  No lor unkno	ves here — <i>Ask 1</i> nger lives here (M own, etc.) — <i>Skip</i>	loved, dead, to next person
1 Yes Go to 1d for n 2 No listed. If all co to Check Item	mpiete, skip	1 ☐ Yes 2 ☐ No	Go to 1d for listed. If all c to Check Iter	next person omplete, skip n B.	1 ☐ Yes 2 ☐ No	Go to 1d for nea listed. If all com to Check Item E	kt person Iplete, skip 3.
1 ☐ Self response 2 ☐ Proxy — Print proxy person num		1 ☐ Self ro 2 ☐ Proxy	esponse - — Print proxy person nur	v's mber → 3	1 ☐ Self re 2 ☐ Proxy	esponse — Print proxy's person numbe	er → 3
1 ☐ Male 2 ☐	Female	1 ☐ Male	2 🗆	Female	1 ☐ Male	2 □ F	emale
Age		Age			Age		
	-						
Print group(s)		Print group	o(s) 7		Print group	<sup>(s)</sup> ₹	
			· · · · · · · · · · · · · · · · · · ·				
If response is a single ances	 stry or don′t	If response	is a single ance	stry or don't	If response	is a single ancestr	ı y or don't
know, skip to 15.  If a multiple response is giv	en. continue	know, skip	to 15. response is giv	ven. continue	know, skip If a multiple	to 15. response is given	ı. continue
with 14b.		with 14b.			with 14b.		
Print ONE group		Print ONE	group 7		Print ONE g	<del>group</del>	
Ancestor	Country		Ancestor	Country		Ancestor	Country
Your father	,	1	Your father			Your father	
Father's			Father's			Father's	
Father Father's mother		<del>                                   </del>	father Father's mother			father Father's	
Earlier generations			Earlier generations			Earlier generations	
on your father's side			on your father's side			on your father's side	
Your mother			Your mother			Your mother	
Mother's father			Mother's father			Mother's father	
Mother's mother			Mother's mother			Mother's mother	
Earlier generations on your			Earlier generations on your			Earlier generations on your	
1 ☐ All responses to 15a	and 15h indicate	1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	mother's side	a and 15b indicate	1 7 44 505	mother's side ponses to 15a ar	ad 15h indicate
"USA," "U.S. Stat know" — Continue	e,'' or ''Don't with 16	''US knov	SA,''' ''U.S. Sta w'' — Continu	te.'' or ''Don't	"US. knov	A,'' ''U.S. State, v'' — Continue w nse of only one co	'' or ''Don't ⁄ith 16
"USA" in 15a and 1 Check Item F	5b — Skip to	"ÚS.	nse or only one A'' in 15a and 1 ck Item F		l "ÙS/	nse of only one co A'' in 15a and 15b k Item F	Skip to
3 ☐ Response of two or more countries other than ''USA'' in 15a and 15b — Skip to 17		othe		more countries in 15a and 15b —	3 Response of two or more countries other than "USA" in 15a and 15b — Skip to 17		
Print (country/countries)	<u> </u>	Print (coun	try/countries)	7	Print (coun	try/countries) 7	
			1 1 1 1				
1 ☐ Single, specific coun	⊥ try, or don't	1 Sinale	e, specific cour	ntry, or don't	1  Sinale	, specific country	y, or don't
know — Skip to Che 2 ☐ More than one count	eck Item F	knov 2  More	w — Skip to Ch than one coun		1		k Item F – Continue
Print country		Print count	try 7	<u>_</u>	Print count	7	
		<b> </b>					
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Section IV — HOUSEHOLD	PERSON 1		PERSON 2	
ROSTER	Last name Per	son No. n label	Last name	Person No. from label
Transcribe the person names from the label in person number order to the columns at the right.	First name	Middle initial	First name	Middle initial
1d. Doesstill live here?  If NONE of the persons live here, END INTERVIEW and complete Sections II and III.	1 ☐ Still lives here — Ask 1e 2 ☐ No longer lives here (Move unknown, etc.) — Skip to i	next person	1 ☐ Still lives here — <i>Ask 1e</i> 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — <i>Skip to next person</i>	
e. Is under 15 years of age?  If "Don't know," say —  Please give me your best estimate.	1 ☐ Yes 2 ☐ No 3 Go to 1d for next per listed. If all complet to Check Item B.	rson e, skip	1 Yes Go to 1d for ne listed. If all cor to Check Item	ext person nplete, skip B.
CHECK ITEM B  Continue in the appropriate column for the current respondent. Mark (X) ONE box to indicate the status of the respondent.	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number →	- 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3	
2. Is male or female?	1 ☐ Male 2 ☐ Fema	le	1 ☐ Male 2 ☐ I	Female
3a. How old is ?  If "Don't know," say — Please give me your best estimate.	Age		Age	
r lease give me your best estimate.				
CHECK ITEM F	. D /	Cl.:- t-		
Refer to age (question 3a).	1	-	1	23
18. Does speak a language other than English at home?	1 ☐ Yes 2 ☐ No — Skip to Check Item G		1 ☐ Yes 2 ☐ No — Skip to Check It	em G
19. What is this language?	Print the language below. (For exchinese, Italian, Spanish, Vietna If more than one, print the name non-English language spoken more frequently.	mese). of the	Print the language below. (Chinese, Italian, Spanish, If more than one, print the non-English language spok frequently.	/ietnamese). name of the
20. How well does speak English — very well, well, not well or not at all?	1  Very well 2  Well 3  Not well 4  Not at all		1  Very well 2  Well 3  Not well 4  Not at all	
21. Where did first learn to speak (Read language in 19) — at home, in school, in the military or someplace else?  Mark (X) ONE box.	1 ☐ At home 2 ☐ In school 3 ☐ In the military 4 ☐ Someplace else		1 ☐ At home 2 ☐ In school 3 ☐ In the military 4 ☐ Someplace else	
22. Where doesnow speak (Read language in 19) ?  Read each category and mark (X) EACH box for which the answer is "Yes."	1 At home? 2 At work? 3 At school? 4 With relatives or friends, not at home? 5 Other? 6 Not spoken anywhere? — Skip to Check Item G		1 At home? 2 At work? 3 At school? 4 With relatives or frier not at home? 5 Other? 6 Not spoken anywher Skip to Check Item G	······································
23. Compared with English, how often does speak (Read language in 19) at home?  Read each category and mark (X) ONE box.	1 All the time — does not speak English 2 More often than English 3 About the same as English 4 Less often than English 5 Almost never speak (Read language in 19)		1 All the time — does n speak English 2 More often than Eng 3 About the same as E: 4 Less often than Engli 5 Almost never speak (language in 19)	lish nglish ish
CHECK ITEM G  Refer to age (question 3a).	1 ☐ If under 15 years old — Skir Check Item M, page 23 2 ☐ If 15 years or older — Contin with 2	านe	1  If under 15 years old – Check Item M, page 2 2  If 15 years or older – 0	23
24. Was a language other than English spoken in 's home when was a child?	1 ☐ Yes — What was the language Print language 7.	age?	1 ☐ Yes — What was the	language?

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PERSON 3		PERS	ON 4	PERSON 5	
Last name	Person No. from label	Last name	Person No. from label	Last name	Person No. from label
First name	Middle initial	First name	Middle initial	First name	Middle initial
1 ☐ Still lives here — Ask 1.0 2 ☐ No longer lives here (Mounknown, etc.) — Skip	oved, dead,	1 Still lives here — 2 No longer lives h unknown, etc.) -		1 ☐ Still lives here — Ask 2 ☐ No longer lives here unknown, etc.) — Sk	(Moved, dead,
1 Yes Go to 1d for nex listed. If all com to Check Item B	t person plete, skip	1  Yes Go to 1d 2 No listed. If a to Check	for next person all complete, skip Item B.	1 ☐ Yes Go to 1d for r listed. If all co to Check Item	omplete, skip
1 ☐ Self response 2 ☐ Proxy — Print proxy's person numbe	r → 3	1 ☐ Self response 2 ☐ Proxy — Print pr person	oxy's number → 3	1 ☐ Self response 2 ☐ Proxy — <i>Print proxy</i> person num	's nber → 3
1 ☐ Male 2 ☐ Fe	male	1 ☐ Male	2 🗆 Female	1 ☐ Male 2 ☐	Female
Age		Age		Age	
1 Less than 5 years of ago Check Item M, page 2	e — Skip to 3	1 Less than 5 years Check Item M, p	s of age — Skip to page 23	1 Less than 5 years of a Check Item M, page	e <b>23</b>
2  5 years of age and olde	r — Continue with 18	2 🗌 5 years of age an	nd older — Continue with 18	2 🗌 5 years of age and ol	der — Continue with 18
1 ☐ Yes 2 ☐ No — Skip to Check Itel	m G	1 ☐ Yes 2 ☐ No — Skip to Che	eck Item G	1 ☐ Yes 2 ☐ No — Skip to Check	ltem G
Print the language below. (F Chinese, Italian, Spanish, Vi If more than one, print the na non-English language spoke frequently.	etnamese). ame of the	Print the language belt Chinese, Italian, Span If more than one, print non-English language frequently.	ish, Vietnamese). the name of the	Print the language below. Chinese, Italian, Spanish, If more than one, print the non-English language spo frequently.	Vietnamese). e name of the
1		1  Very well 2  Well 3  Not well 4  Not at all		1  Very well 2  Well 3  Not well 4  Not at all	
1 ☐ At home 2 ☐ In school 3 ☐ In the military 4 ☐ Someplace else		1 ☐ At home 2 ☐ In school 3 ☐ In the military 4 ☐ Someplace else		1 ☐ At home 2 ☐ In school 3 ☐ In the military 4 ☐ Someplace else	
1 At home? 2 At work? 3 At school? 4 With relatives or frien not at home? 5 Other? 6 Not spoken anywhere Skip to Check Item G		1 At home? 2 At work? 3 At school? 4 With relatives o not at home? 5 Other? 6 Not spoken any Skip to Check is	where? —	1 At home? 2 At work? 3 At school? 4 With relatives or fri not at home? 5 Other? 6 Not spoken anywhers of Check Item	ere? —
1 All the time — does no speak English 2 More often than Englis 3 About the same as En 4 Less often than Englis 5 Almost never speak (Inguage in 19)	ish Iglish Ish	1 All the time — d speak English 2 More often that 3 About the same 4 Less often than 5 Almost never speak anguage in 19	n English as English English peak <i>(Read</i>	1 All the time — does speak English 2 More often than English 3 About the same as 4 Less often than English 5 Almost never speal language in 19)	nglish English glish
1  If under 15 years old — Check Item M, page 2 2  If 15 years or older — C	3 Continue	1  If under 15 years Check Item M, 2  If 15 years or old	page 23 Ier — Continue	1  If under 15 years old Check Item M, page 2  If 15 years or older –	e 23 - Continue
1 □ Yes − What was the I  Print language →  2 □ No	anguage?	1 Yes — What was		1  Yes — What was th	
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Section IV — HOUSEHOLD	PERSON 1	PERSON 2		
ROSTER	Last name Person No. from label	Last name Person No.		
Transcribe the person names from the label in person number order to the columns at the right.	First name Middle initial	First name Middle initial		
1d. Does still live here?  If NONE of the persons live here, END INTERVIEW and complete Sections II and III.	1 ☐ Still lives here — Ask 1e 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — Skip to next person  1 ☐ Still lives here — Ask 1e 2 ☐ No longer lives here (Moved, dead, unknown, etc.) — Skip to next			
e. Is under 15 years of age?  If "Don't know," say —  Please give me your best estimate.	1 ☐ Yes 2 ☐ No Iisted. If all complete, skip to Check Item B.	1 Yes Go to 1d for next person listed. If all complete, skip to Check Item B.		
CHECK ITEM B		_		
Continue in the appropriate column for the current respondent. Mark (X) ONE box to indicate the status of the respondent.	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3		
2. Is male or female?	1 ☐ Male 2 ☐ Female	1 ☐ Male 2 ☐ Female		
3a. How old is ?	Age	Age		
If "Don't know," say — Please give me your best estimate.	200 (1990) 100 (1990) 100 (1990) 100 (1990) 100 (1990)			
05 11				
25a. Has ever been on active-duty military service in the Armed Forces of the United States?	1 ☐ Yes 2 ☐ No — <i>Skip to 25c</i>	1 ☐ Yes 2 ☐ No — <i>Skip to 25c</i>		
CHECK ITEM H  Refer to sex (question 2).  Is female?	1 ☐ Yes, female — Continue with 25b 2 ☐ No — Skip to 25d	1 ☐ Yes, female — Continue with 25b 2 ☐ No — Skip to 25d		
25b. Did 's military service consist entirely of service as a CIVILIAN employee or CIVILIAN volunteer for the Red Cross, USO, Public Health Service, War Department, Navy Department, or Defense Department?	1 ☐ Yes — Skip to 27 2 ☐ No — Skip to 25d	1 ☐ Yes — Skip to 27 2 ☐ No — Skip to 25d		
c. Has ever been in the United States military Reserves or National Guard?	1 ☐ Yes — <i>Skip to 25e</i> 2 ☐ No — <i>Skip to 27</i>	1 ☐ Yes — <i>Skip to 25e</i> 2 ☐ No — <i>Skip to 27</i>		
d. Did 's military service consist entirely of duty for the military Reserves or the National Guard, such as initial training, monthly meetings, and summer camp?	1 □ Yes 2 □ No − <i>Skip to 26</i>	1 ☐ Yes 2 ☐ No — <i>Skip to 26</i>		
e. Wasever called or ordered to active duty NOT COUNTING training?	1 ☐ Yes 2 ☐ No — <i>Skip to 27</i>	1 ☐ Yes 2 ☐ No — <i>Skip to 27</i>		
26. Between what dates (month, day, year) was on active-duty	FROM TO	FROM TO		
military service? If had breaks in service, please specify the	Mo. Day Year Mo. Day Year	Mo. Day Year Mo. Day Year		
beginning and ending dates of each		1 9 1 9 1 9		
period of service.				
	19 19	19 119		
	o □ Still on active duty	o □ Still on active duty		
27. The next few questions ask about health.				
a. Does have any difficulty seeing words and letters in ordinary newspaper print even when wearing glasses or contact lenses if usually wears them?	1 ☐ Yes 2 ☐ No — Skip to Check Item I	1 ☐ Yes 2 ☐ No — <i>Skip to Check Item I</i>		
b. Is able to do this at all?	1 ☐ Yes 2 ☐ No	1 ☐ Yes 2 ☐ No		
c. Has had difficulty seeing for 6 months or longer?	1 ☐ Yes 2 ☐ No	1 ☐ Yes 2 ☐ No		

PERSON 3		PERSON	1 4	PERSON 5		
Last name	Person No. from label	Last name	Person No. from label	Last name	Person No. from label	
First name	Middle initial	First name	Middle initial	First name	Middle initial	
1 ☐ Still lives here — <i>Ask 10</i> 2 ☐ No longer lives here (Mo unknown, etc.) — <i>Skip</i>	oved, dead,	1 ☐ Still lives here — As 2 ☐ No longer lives here unknown, etc.) — S	(Moved dead		here (Moved, dead, — <i>Skip to next person</i>	
1  Yes Go to 1d for nex listed. If all com to Check Item B	at person plete, skip	1 Yes Go to 1d for listed. If all c to Check Iter	omplete, skip	1 Yes Go to 10 2 No listed. If	I for next person all complete, skip k Item B.	
1 ☐ Self response 2 ☐ Proxy — Print proxy's person numbe	er → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy person nur		1 ☐ Self response 2 ☐ Proxy — <i>Print p</i> person	proxy's n number → 3	
1 ☐ Male 2 ☐ Fe	emale	1 ☐ Male 2 ☐	Female	ı ☐ Male	2 - Female	
Age		Age		Age		
1 ☐ Yes 2 ☐ No — <i>Skip to 25c</i>		1 ☐ Yes 2 ☐ No — <i>Skip to 25c</i>		1 ☐ Yes 2 ☐ No — <i>Skip to 2</i> :	5c	
1 ☐ Yes, female — Continu 2 ☐ No — Skip to 25d	e with 25b	1 ☐ Yes, female — Cont 2 ☐ No — Skip to 25d	inue with 25b	1 ☐ Yes, female — 0 2 ☐ No — Skip to 29		
1 ☐ Yes — <i>Skip to 27</i> 2 ☐ No — <i>Skip to 25d</i>		1 ☐ Yes — Skip to 27 2 ☐ No — Skip to 25d		1 ☐ Yes — Skip to 2 2 ☐ No — Skip to 2		
1 ☐ Yes — <i>Skip to 25e</i> 2 ☐ No — <i>Skip to 27</i>		1 ☐ Yes — <i>Skip to 25e</i> 2 ☐ No — <i>Skip to 27</i>		1 ☐ Yes — Skip to 2 2 ☐ No — Skip to 2		
1 □ Yes 2 □ No − <i>Skip to 26</i>		1		1 ☐ Yes 2 ☐ No — <i>Skip to 2</i> 0	9	
1 ☐ Yes 2 ☐ No — <i>Skip to 27</i>		1 ☐ Yes 2 ☐ No — <i>Skip to 27</i>		1 ☐ Yes 2 ☐ No — Skip to 2	7	
FROM	то	FROM	то	FROM	ТО	
Mo. Day Year Mo.	Day Year	Mo. Day Year Mo		Mo. Day Year	Mo. Day Year	
19	1 9 1	1 9 1 9	1 9 1	19	1 9	
	Still on active duty		Still on active duty		o ☐ Still on active duty	
1 □ Yes 2 □ No − Skip to Check Ite	m I	1 ☐ Yes 2 ☐ No — <i>Skip to Check</i>	ltem I	1 ☐ Yes 2 ☐ No — <i>Skip to C</i>	heck Item I	
1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
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Section IV — HOUSEHOLD	PERSON 1		PERSON 2		
ROSTER	Last name	Person No. from label	Last name	Person No.	
Transcribe the person names from the label in person number order to the columns at the right.	First name	Middle initial	First name	from label Middle initial	
1d. Doesstill live here?  If NONE of the persons live here, END INTERVIEW and complete Sections II and III.	1 ☐ Still lives here — Ask 1. 2 ☐ No longer lives here (Mo unknown, etc.) — Skip	oved, dead, to next person	1 ☐ Still lives here ─ <i>Ask 1</i> 2 ☐ No longer lives here (N unknown, etc.) — <i>Skip</i>	loved, dead, o to next person	
e. lsunder 15 years of age?  If "Don't know," say —  Please give me your best estimate.	1 ☐ Yes 2 ☐ No 3 Go to 1d for nex listed. If all comp to Check Item B.	t person olete, skip	1 ☐ Yes 2 ☐ No 3 Go to 1d for near listed. If all come to Check Item E	xt person oplete, skip 3.	
CHECK ITEM B					
Continue in the appropriate column for the current respondent. Mark (X) ONE box to indicate the status of the respondent.	1 ☐ Self response 2 ☐ Proxy — Print proxy's person numbe	r → 3	1 ☐ Self response 2 ☐ Proxy — <i>Print proxy's</i> person numbe	er → 3	
2. Is male or female?	1 ☐ Male 2 ☐ Fe	male	1 ☐ Male 2 ☐ F	emale	
3a. How old is ?	Age		Age	<u> </u>	
If ''Don't know,'' say — Please give me your best estimate.					
CHECK ITEM I	_				
Refer to Check Item B.	1 ☐ Yes — Mark 28a, 28b, a 28c without ask		1 ☐ Yes — Mark 28a, 28b, 28c without as		
ls a self respondent?	28C Without ask 2  No – Ask 28a	iy	$_{2}\square$ No $_{-}$ Ask 28a	Nii iy	
28a. Does have any difficulty hearing what is said in normal conversation with another person (using a hearing aid if usually wears one)?	1		1 ☐ Yes 2 ☐ No — <i>Skip to 29a</i>		
b. Is able to do this at all?	1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
c. Has had difficulty hearing for 6 months or longer?	1		2 🔲 No		
29a. Does generally use an aid to help get around, such as crutches, a cane, or a wheelchair?	1 ☐ Yes 2 ☐ No <i>Skip to 30</i>		1 ☐ Yes 2 ☐ No — <i>Skip to 30</i>		
b. Has used an aid for 6 months or longer?	1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
30. These next questions ask whether 's health or physical condition affects 's ability to do certain activities.					
a. Does have any difficulty walking a quarter of a mile — that is, about 3 city blocks?	1		1		
b. Is able to do this at all?	1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
c. Has had difficulty walking for 6 months or longer?	1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
31a. Does have any difficulty walking up a flight of stairs without resting?	1 ☐ Yes 2 ☐ No — <i>Skip to 32a</i>		1 ☐ Yes 2 ☐ No — <i>Skip to 32a</i>		
b. Is able to do this at all?	1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
c. Has had difficulty using stairs for 6 months or longer?	1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No	_	

PERSON 3		PERSON 4	1	PERSON 5		
Last name	Person No. from label	Last name	Person No. from label	Last name	Person No. from label	
First name	Middle initial	First name	Middle initial	First name	Middle initial	
1 ☐ Still lives here — Ask 1. 2 ☐ No longer lives here (M. unknown, etc.) — Skip	oved, dead,	1 ☐ Still lives here — Ask 2 ☐ No longer lives here (Nunknown, etc.) — Skij	Noved, dead, o to next person	1  Still lives her 2  No longer live unknown, et	e — <i>Ask 1e</i> es here (Moved, dead, c.) — <i>Skip to next person</i>	
1  Yes Go to 1d for nex listed. If all com to Check Item B	kt person plete, skip	1  Yes Go to 1d for ne 2  No listed. If all con to Check Item	xt person nplete, skip B.	1  Yes Go to 2  No listed to Ch	1d for next person . If all complete, skip eck Item B.	
1 ☐ Self response 2 ☐ Proxy — Print proxy's person numbe	er → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person numb	er → 3	1 ☐ Self response 2 ☐ Proxy — Prin		
1 ☐ Male 2 ☐ Fe	emale	1 ☐ Male 2 ☐ F	emale	1 ☐ Male	2 🗆 Female	
Age		Age		Age		
1 ☐ Yes — Mark 28a, 28b, 28c without ask 2 ☐ No — Ask 28a	and king	1 □ Yes — Mark 28a, 28b 28c without as 2 □ No — Ask 28a	, and sking	1 □ Yes − Mark . 28c w 2 □ No − Ask 28	vithout asking	
1 ☐ Yes 2 ☐ No — <i>Skip to 29a</i>		1 ☐ Yes 2 ☐ No — <i>Skip to 29a</i>		1 ☐ Yes 2 ☐ No — <i>Skip to</i>	29a	
1 ☐ Yes 2 ☐ No	•	1 □ Yes 2 □ No		1 ☐ Yes 2 ☐ No		
1 ☐ Yes 2 ☐ No 3 ☐ Self respondent		1 ☐ Yes 2 ☐ No 3 ☐ Self respondent		1 ☐ Yes 2 ☐ No 3 ☐ Self responde	ent	
1 ☐ Yes 2 ☐ No — <i>Skip to 30</i>		1 □ Yes 2 □ No — <i>Skip to 30</i>		1 ☐ Yes 2 ☐ No — <i>Skip to</i>	30	
1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
1 ☐ Yes 2 ☐ No — <i>Skip to 31a</i>		1 ☐ Yes 2 ☐ No — <i>Skip to 31a</i>		1 ☐ Yes 2 ☐ No — <i>Skip to</i>	31a	
1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
1 ☐ Yes 2 ☐ No — <i>Skip to 32a</i>		1 ☐ Yes 2 ☐ No — <i>Skip to 32a</i>		1 ☐ Yes 2 ☐ No — <i>Skip to</i>	32a	
1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
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Section IV — HOUSEHOLD	PERSON 1		PERSON 2		
ROSTER	Last name	Person No. from label	Last name	Person No. from label	
Transcribe the person names from the label in person number order to the columns at the right.	First name	Middle initial	First name	Middle initial	
1d. Doesstill live here?  If NONE of the persons live here, END INTERVIEW and complete Sections II and III.	1 ☐ Still lives here — Ask 1. 2 ☐ No longer lives here (Munknown, etc.) — Skip	oved, dead,	1 ☐ Still lives here — Ask 1 2 ☐ No longer lives here (N unknown, etc.) — Skij	loved, dead, to next person	
e. Is under 15 years of age?  If "Don't know," say —  Please give me your best estimate.	1 ☐ Yes 2 ☐ No 3 Go to 1d for nex listed. If all comp to Check Item B	t person olete, skip	1 ☐ Yes 2 ☐ No Bo to 1d for ne. listed. If all come to Check Item E	kt person aplete, skip 3.	
CHECK ITEM B					
Continue in the appropriate column for the current respondent. Mark (X) ONE box to indicate the status of the respondent.	1 ☐ Self response 2 ☐ Proxy — Print proxy's person numbe	r → 3	1	er → 3	
2. Is male or female?	1 ☐ Male 2 ☐ Fe	male	1 ☐ Male 2 ☐ F	emale	
3a. How old is ?	Age		Age		
If "Don't know," say — Please give me your best estimate.			1000000		
32a. Does have any difficulty lifting and carrying something as heavy as 10 lbs., such as a full bag of groceries?	1 ☐ Yes 2 ☐ No — <i>Skip to Check Ite</i>	m J	1 ☐ Yes 2 ☐ No — <i>Skip to Check Its</i>	em J	
b. Is able to do this at all?					
	1 □ Yes 2 □ No		1 ☐ Yes 2 ☐ No		
c. Has had difficulty lifting or					
carrying for 6 months or longer?	1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
CHECK ITEM J					
Refer to age (question 3a).	1 ☐ If 15–65 years — Conta 2 ☐ If 66 years or older — S		1 ☐ If 15–65 years — Cont 2 ☐ If 66 years or older — S		
33a. Does have a physical, mental, or other health condition that has lasted for 6 or more months and which limits the kind or amount of work can do at a job?	1 ☐ Yes 2 ☐ No <i>— Skip to 34</i>		1 ☐ Yes 2 ☐ No — <i>Skip to 34</i>		
b. Does this condition prevent from working at a job?	1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		
34. Because of a health condition that has lasted for 6 or more months, does have any difficulty —					
a. going outside the home alone, for example, to shop or visit a doctor's office?	1 □ Yes 2 □ No		1 ☐ Yes 2 ☐ No		
<ul> <li>taking care of his or her own personal needs, such as bathing, dressing, or getting around inside the home?</li> </ul>	1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		

PERSON 3		PERSON 4	•	PERSON 5	
Last name	Person No. from label	Last name	Person No. from label	Last name	Person No. from label
First name	Middle initial	First name	Middle initial	First name	Middle initial
1 ☐ Still lives here — Ask 10 2 ☐ No longer lives here (Mo unknown, etc.) — Skip	oved, dead,	1 ☐ Still lives here — Ask 1 2 ☐ No longer lives here (M unknown, etc.) — Skip	oved, dead,	1 ☐ Still lives her 2 ☐ No longer liv unknown, et	e — Ask 1e es here (Moved, dead, c.) — Skip to next person
1  Yes Go to 1d for nex listed. If all composite to Check Item B	t person olete, skip	1 ☐ Yes 2 ☐ No 3 Go to 1d for new listed. If all com to Check Item B	kt person plete, skip I.	1  Yes Go to 2 No listed to Ch	1d for next person I. If all complete, skip eck Item B.
1 ☐ Self response 2 ☐ Proxy — Print proxy's person numbe	r → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person numbe	er → 3	1 ☐ Self respons 2 ☐ Proxy — Prin pers	
1 ☐ Male 2 ☐ Fe	male	1 ☐ Male 2 ☐ Fe	emale	1 ☐ Male	2 - Female
Age		Age		Age	
_				_	
1 ☐ Yes 2 ☐ No — Skip to Check Iter	n J	1 □ Yes   2 □ No − Skip to Check Ite	m J	1 ☐ Yes 2 ☐ No — <i>Skip to</i>	Check Item J
1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No	
1 □ Yes		1 ☐ Yes		ı □ Yes	
2 □ No		2 □ No		2 🗌 No	
1 ☐ If 15–65 years — Conta 2 ☐ If 66 years or older — S		1 ☐ If 15–65 years — Cont 2 ☐ If 66 years or older — S			rs — Continue with 33a r older — Skip to 34
1 ☐ Yes 2 ☐ No — <i>Skip to 34</i>		1 ☐ Yes 2 ☐ No — <i>Skip to 34</i>		1 □ Yes 2 □ No − <i>Skip to</i>	34
1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No	
1 □ Yes 2 □ No		1 □ Yes 2 □ No		1 □ Yes 2 □ No	
1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No		1 ☐ Yes 2 ☐ No	
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Se	ction IV -	HOUSEHOLD	PERSON 1		PERSON 2	
Tr	anscribe the	ROSTER person names from	Last name	Person No. from label	Last name	Person No. from label
the	e label in pers e columns at	son number order to	First name	Middle initial	First name	Middle initial
1	INTERVIEW a and III.	e persons live here, END and complete Sections II		here (Moved, dead, — <i>Skip to next person</i>	2 ☐ No long unknov	es here — <i>Ask 1e</i> ger lives here (Moved, dead, wn, etc.) — <i>Skip to next person</i>
1 /	lf ''Don't kno	15 years of age? ow,'' say — me your best estimate.	1 Yes Go to 1d listed. If to Check	for next person all complete, skip tlem B.	1 Tes }	Go to 1d for next person listed. If all complete, skip to Check Item B.
Co	rrent respond	appropriate column for the dent. Mark (X) ONE box to tus of the respondent.	1 ☐ Self response 2 ☐ Proxy — Print p person	roxy's number → 3	1 ☐ Self res 2 ☐ Proxy -	sponse  — Print proxy's  person number → 3
2. I	ls male o	or female?	1 ☐ Male	2  Female	1 ☐ Male	2 🗆 Female
	How old is . If ''Don't kno Please give :		Age		Age	
35.	please desc activity or of (referen- than one jo which	ext few questions, cribe 's chief job business during the week ce date). If had more by describe the one at worked the most hours. To job or business during f (reference date), give n for the most recent job s since January 1, 1989.				
a.		. then skip to 36. did work?	Print name of employ	ver 🗸	Print name o	of employer
	was this?	of business or industry	was employed. Fi	at the location where for example: hospital, g, mail order house, sturing, retail bakery	was emp	e activity at the location where ployed. For example: hospital, publishing, mail order house, manufacturing, retail bakery p
	ONE box.	nly — category and mark (X)	1  Manufacturing 2  Wholesale trad 3  Retail trade? 4  Other (agricultuser)	le?		sale trade?
	Was Read each c ONE box.	ategory and mark (X)	of an individuor commissio  2  An employee of FOR-PROFIT, charitable org  3  A local GOVER (city, county,  4  A state GOVER  5  An active-duty member?  6  A Federal GOVI employee (excarmed Forces)  7  SELF-EMPLOY INCORPORAT professional p	pany or business or al, for wages, salary ns? ns? fa PRIVATE NOT-tax-exempt, or janization? NMENT employee etc.)? NMENT employee? Armed Forces ERNMENT cluding active-duty s)? ED in own NOT TED business, oractice, or farm? ED in own rectice, or farm? OUT PAY in family	PROF of an i or con 2 An emp FOR-F charit 3 A local (city, of a state) 5 An active 6 A Feder emplo Armec 7 SELF-E INCOL profes 8 SELF-E INCOL profes 9 Workin-	ployee of a PRIVATE FOR PRIVATE FOR PRIVATE FOR PRIVATE NOT-PROFIT, tax-exempt, or able organization? GOVERNMENT employee county, etc.)? GOVERNMENT employee? ve-duty Armed Forces per? ral GOVERNMENT or able organization? MPLOYED in own NOT RPORATED business, ssional practice, or farm? MPLOYED in own RPORATED business, ssional practice, or farm? g WITHOUT PAY in family pess or farm?
		k at a job or in a on a farm, at any 1989?	1 ☐ Yes — <i>Skip to 38</i> 2 ☐ No	8a	1 ☐ Yes — S 2 ☐ No	Skip to 38a
	Did do a time, or sea few days dเ	ny temporary, part- sonal work even for a ıring 1989?	1 ☐ Yes 2 ☐ No — <i>Skip to Ch</i>	eck Item K	1 ☐ Yes 2 ☐ No — Sk	kip to Check Item K
_	did work Include paid leave, and n	9, in how many weeks « even for a few hours? d vacation, paid sick nilitary service as work.	Weeks			Weeks
		s that worked, nours did usually eek?	Hours			Hours

PERSON 3	PERSON 4	ļ.	PERSON 5	
Last name Person No from label		Person No. from label	Last name	Person No. from label
First name Middle	initial First name	Middle initial	First name	Middle initial
1 ☐ Still lives here — Ask 1e 2 ☐ No longer lives here (Moved, dead unknown, etc.) — Skip to next pe	rson unknown, etc.) — Skip	loved, dead,	1 ☐ Still lives here — Ask 2 ☐ No longer lives here (Nunknown, etc.) — Ski	Moved, dead,
1 Yes Go to 1d for next person listed. If all complete, skip to Check Item B.	1  Yes Go to 1d for ne 2  No listed. If all con to Check Item E	xt person nplete, skip 3.	1  Yes Go to 1d for ne 2  No listed. If all con to Check Item	mplete, skip
1 ☐ Self response 2 ☐ Proxy — Print proxy's person number → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person numb	er → 3	1 ☐ Self response 2 ☐ Proxy — Print proxy's person numb	
1 Male 2 Female	1 ☐ Male 2 ☐ F	emale	1 ☐ Male 2 ☐ F	emale
Age	Age		Age	
Print name of employer	Print name of employer 7		Print name of employer	
Describe the activity at the location who was employed. For example: hosp newspaper publishing, mail order hous auto engine manufacturing, retail bake	ital, was employed. For exame	nple: hospital, order house.	Describe the activity at the was employed. For exa newspaper publishing, mai auto engine manufacturing	mple: hospital, il order house.
1	1 ☐ Manufacturing? 2 ☐ Wholesale trade? 3 ☐ Retail trade? 4 ☐ Other (agriculture, co			
1  ☐ An employee of a PRIVATE FOR PROFIT company or business of an individual, for wages, sal or commissions? 2  ☐ An employee of a PRIVATE NO FOR-PROFIT, tax-exempt, or charitable organization? 3  ☐ A local GOVERNMENT employe (city, county, etc.)? 4  ☐ A state GOVERNMENT employe (an active-duty Armed Forces member? 6  ☐ A Federal GOVERNMENT employee (excluding active-duty Armed Forces)? 7  ☐ SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm? 8  ☐ SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm?	or lary of an individual, for or commissions?  T- 2 An employee of a PR FOR-PROFIT, tax-es charitable organizates  ee 3 A local GOVERNMEN (city, county, etc.)?  ee? 4 A state GOVERNMEN 5 An active-duty Armed member?  6 A Federal GOVERNM employee (excluding Armed Forces)?  7 SELF-EMPLOYED in INCORPORATED be professional practices?	r business or wages, salary  IVATE NOT- cempt, or  ition?  IT employee  IT employee?  d Forces  IENT g active-duty business, e, or farm? business, e, or farm?	1 An employee of a PR PROFIT company o of an individual, for or commissions? 2 An employee of a PR FOR-PROFIT, tax-es charitable organiza: 3 A local GOVERNMEI (city, county, etc.)? 4 A state GOVERNMEI 5 An active-duty Armes member? 6 A Federal GOVERNM employee (excludin Armed Forces)? 7 SELF-EMPLOYED in INCORPORATED b professional practic 8 SELF-EMPLOYED in INCORPORATED b professional practic 9 Working WITHOUT F business or farm?	r business or r wages, salary
1 ☐ Yes — <i>Skip to 38a</i> 2 ☐ No	1 ☐ Yes — Skip to 38a 2 ☐ No		1 ☐ Yes — <i>Skip to 38a</i> 2 ☐ No	
1 ☐ Yes 2 ☐ No — Skip to Check Item K	1 ☐ Yes 2 ☐ No — Skip to Check Ite	m K	1 ☐ Yes 2 ☐ No — <i>Skip to Check Ite</i>	em K
Weeks	Weeks		Weeks	
Hours FORM D-1010 (7-25-90)	Hours		Hours	Page 21

CHECK ITEM K	H2b. While some homes are owned free and clear, many are owned with a mortgage or a similar type of loan.
Have questions H1—H10 been answered?	Is this home owned free and clear?
nave questions n1—n10 been answered?	1 $\square$ Yes, owned free and clear $-$ Skip to H6a
If ''Yes,'' skip to Check Item M	$2 \square No - Ask - Is$ it owned with any of the following?
If "No," print respondent's person number	Read each category and mark (X) each box for which the answer is "Yes."
and continue with H1.	3 ☐ A mortgage?
	4 A contract to purchase?
	□ A dood of trust or trust dood?
,	Skip to H6a
The next few questions are about's living quarters.	$_7\square$ Some other loan secured by the
H1. Are your living quarters in:	house or apartment?
Read each category.	H3a. What is the monthly contract rent?
1 A mobile home or trailer	
2 A one-family house detached from any other house	\$ .00
3 A one-family house attached to one or more houses	Monthly amount — Dollars
4 A building with 2 or more apartments — If the structure is an apartment building, ask — How many	h Dese the Federal Ctete or level never more now port
apartments are in this building?	b. Does the Federal, State, or local government pay part of the rent?
$5 \square$ 2 apartments $6 \square$ 3 or 4 apartments	1 ☐ Yes — Ask — Is this payment made to the householder or to the owner?
7 ☐ 5 to 9 apartments	2 Householder
$_8\square$ 10 to 19 apartments	3 Owner
9 $\square$ 20 to 49 apartments	4 No Chin to H2o
10 $\square$ 50 or more apartments	5 ☐ Don't know Skip to H3e
11 $\square$ Other type of living quarters — Print description $_{m{ u}}$	
	c. Did you include this amount in the monthly rent you just reported?
	1 ☐ Yes — <i>Skip to H3e</i> 2 ☐ No
	d. What is the amount of monthly rent paid by the government?
H2a. Is this (house/apartment) —	\$ .00
Read each category and mark (X) ONE box.	Monthly amount — Dollars
1 $\square$ Owned or being bought by you? — Skip to H2b	o 🗌 Don't know
$_2$ $\square$ Owned or being bought by someone else living	e. Does someone living outside this (house/apartment)
in this household? — Skip to H2b 3 ☐ Rented for cash rent? — Skip to H3a	other than the government pay part of the rent?
4 Occupied without payment of cash rent? —	1 ☐ Yes — Ask — Is this payment made to the householder or to the owner?
If "Yes," ask — Do you occupy this	
(house/apartment) without payment of cash rent because it is provided —	2 ∐ Householder 3 ☐ Owner
Read each category and mark (X) ONE box.	
5 ☐ As military living quarters?	4 □ No 5 □ Don't know  Skip to H4a
6 ☐ As partial payment for services	
rendered such as watchman,	f. Did you include this amount in the monthly rent you just reported?
janitor, tenant farmer, etc.? Skip to H6a  ¬□ By a friend or relative?	
8 Free of charge for some other	1 ☐ Yes — <i>Skip to H4a</i> 2 ☐ No
reason? Print reason	g. What is the amount of monthly rent paid by someone living outside this (house/apartment)?
,	menty outside tine (nodse/apartinent/):
	\$ .00
	Monthly amount — Dollars
	o □ Don't know

Page 22

H4a. Does the monthly rent include any meals?	H7. About when was this building first built?
21 $\square$ Yes $-$ Ask $-$ How many meals per day?	1 □ 1989 or 1990
22 🗆 1	2 □ 1985 to 1988
23 🗆 2	3 □ 1980 to 1984
24☐ 3 or more	4 🔲 1970 to 1979
25 ☐ No	5 _ 1960 to 1969
	6 ☐ 1950 to 1959
b. Does the monthly rent include the availability of a	7
professional medical person (doctor, nurse, physical	8 ☐ 1939 or earlier
therapist, etc.) on the premises?	H8. The next few questions refer to vehicles used by
1 ☐ Yes	members of your household.
2 ☐ No	a.On April 1, how many automobiles were kept at home
- Decade and the state of the	for use by members of your household? Exclude vans
c. Does the monthly rent include convalescent facilities on the premises?	and trucks.
1 ☐ Yes	o None
2 □ No	1 1 1
2 🗀 110	2
d. Does the monthly rent include transportation for	] 3 ☐ 3 4 ☐ 4 or more
shopping or recreational needs?	4 4 or more
1 ☐ Yes	b. On April 1, how many vans or trucks of one ton capacity
2 No	or less were kept at home for use by members of your household?
	1
CHECK ITEM L	0
Potento aucestiano III a d	$\begin{bmatrix} 1 & 1 \\ 2 & 2 \end{bmatrix}$
Refer to questions H4a – d.	3 3
1 $\square$ Responses to questions H4a $-$ d were <b>all</b>	4 □ 4 or more
"No" — Skip to H6a	TO THIS IS
2	H9. If this structure is an apartment building, skip to Check
	Item M. Otherwise, read the statement and question below.
H5. Would you classify this facility as —	Now I would like to ask you about the land on which your home is located.
Read each category and mark (X) ONE box.	Is this house on less than 1 acre?
1 Continuing care facility?	1 ☐ Yes — Skip to Check Item M
2 Retirement center run by local or State government?	2 No
3 ☐ Retirement center run by a nonprofit organization?	
4 Something else? — Print classification 7	H10. In 1989, what were the actual sales of all agricultural products from this property?
,	· · ·
	0 ☐ None
	1 □ \$1 to \$999 2 □ \$1,000 to \$2,499
H6a. Is there hot and cold piped water in this	2 □ \$1,000 to \$2,499 3 □ \$2,500 to \$4,999
(house/apartment)?	4 □ \$5,000 to \$9,999
1 $\square$ Yes, hot and cold piped water	5 ☐ \$10,000 or more
2 Only cold piped water	· ·
з $\square$ No piped water	CHECK ITEM M
	Has an interview been conducted for each person listed
b. Is there a flush toilet in this (house/apartment)?	in Section IV, who still lives here (refer to 1d)?
1 ☐ Yes	₁ ☐ Yes — END INTERVIEW and complete Section III
2 □ No	on front cover.
	2 ☐ No — Ask by name for the next person listed in Section IV who still lives here. Start with
c. Is there a bathtub or shower in this (house/apartment)?	Check Item B in the column corresponding to
1 ☐ Yes	the name of the respondent. For each person
2 □ No	under 15 years old, use a parent or guardian as the proxy respondent (or the current
	respondent, if appropriate).

FORM D-1010 (7-25-90)

### Your Guide for the

# 1990 U.S. Census Form

This guide gives helpful information on filling out your census form. If you need more help, call the local U.S. census office. **The telephone number is on the cover of the questionnaire.** After you have filled out your form, please return it in the **envelope** we have provided.

On the inside	Page
How to fill out your census form	2
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Your answers are confidential	2
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What the census is about	12
Why the census asks certain questions	12
CENSUS '90	U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

#### **How to Fill Out Your Census Form**

Please use a black lead pencil only. Black lead pencil is better to use than ballpoint or other pens. Most questions ask you to fill in the circle, or to print the information. See **Example** below.

Make sure you print answers for everyone in this household. If someone in the household, such as a roomer or boarder, does not want to give you all the information for the form, print at least the person's name and answer questions 2 and 3. A census taker will call to get the other information directly from the person.

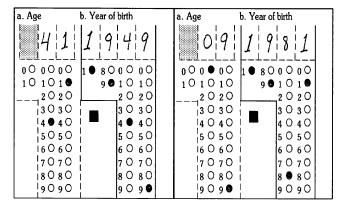
There may be a question you cannot answer exactly. For example, you might not know the age of an elderly person or the price for which your house would sell. Ask someone else in your household; if no one knows, give your best estimate.

Instructions for individual questions begin on page 3 of this guide. They will help you to understand the questions and answer them correctly.

If you have a question about filling out the census form or need assistance, call the local U.S. census office. The telephone number is given on the cover of the questionnaire.

If you do not mail back your census form, a census taker will be sent out to assist you. But it saves time and your taxpayer dollars if you fill out the form yourself and mail it back

#### Example



#### **Your Answers Are Confidential**

The law authorizing the census (Title 13, U.S. Code) also provides that your answers are confidential. No one except census workers may see your completed form and they can be fined and/or imprisoned for any disclosure of your answers. Only after 72 years can your individual census form become available to other government agencies (whether federal, state, county, or local). Until then, no other person or business can see your individual report.

The same law that protects the confidentiality of your answers requires that you provide the information asked in this census to the best of your knowledge.

Information collected from the decennial census is used for a variety of statistical purposes. Census information is used to find out where funding is most needed for schools, health centers, highways, and other services. Census results are used by members of public and private groups--including community organizations--and by businesses and industries, as well as by agencies at all levels of government.

## Instructions for Questions 1a through 7

1a. List everyone who lives at this address in question 1a. If you are not sure if you should list a person, see the rules on page 1 of the census form. If you are still not sure, answer as best you can and fill in "Yes" for question H1a or H1b, as appropriate.

If there are more than seven people in your household, please list all the persons in question 1a, complete the form for seven people, and mail it back in the enclosed envelope. A census taker will call to obtain the information for the additional persons.

- **b.** If everyone listed in question 1a usually lives at another address(es), print the address(es) in 1b.
- **2.** Fill one circle to show how each person is related to the person in column 1.

If **Other relative** of the person in column 1, print the exact relationship such as son-in-law, daughter-in-law, grandparent, nephew, niece, mother-in-law, father-in-law, cousin, and so on.

If the **Stepson/stepdaughter** of the person in column 1 also has been legally adopted by the person in column 1, mark **Stepson/stepdaughter** but do not mark **Natural-born or adopted son/daughter**. In other words, **Stepson/stepdaughter** takes precedence over **Adopted son/daughter**.

4. Fill ONE circle for the race each person considers himself/herself to be.

If you fill the **Indian (Amer.)** circle, print the name of the tribe or tribes in which the person is enrolled. If the person is not enrolled in a tribe, print the name of the principal tribe(s).

If you fill the **Other API** circle [under **Asian or Pacific Islander (API)]**, **only** print the name of the group to which the person belongs. For example, the **Other API** category includes persons who identify as Burmese, Fijian, Hmong, Indonesian, Laotian, Bangladeshi, Pakistani, Tongan, Thai, Cambodian, Sri Lankan, and so on.

If you fill the **Other race** circle, be sure to print the name of the race. If the person considers himself/herself to be **White**, **Black or Negro**, **Eskimo or Aleut**, fill one circle only. Please do not print the race in the boxes.

The **Black or Negro** category also includes persons who identify as African-American, Afro-American, Haitian, Jamaican, West Indian, Nigerian, and so on.

**All** persons, regardless of citizenship status, should answer this question.

- 5. Print age at last birthday in the space provided (print "00" for babies less than 1 year old). Fill in the matching circle below each box. Also, print year of birth in the space provided. Then fill in the matching circle below each box. For an illustration of how to complete question 5, see the **Example** on page 2 of this guide.
- If the person's only marriage was annulled, mark Never married.
- 7. A person is of Spanish/Hispanic origin if the person's origin (ancestry) is Mexican, Mexican-Am., Chicano, Puerto Rican, Cuban, Argentinean, Colombian, Costa Rican, Dominican, Ecuadoran, Guatemalan, Honduran, Nicaraguan, Peruvian, Salvadoran, from other Spanish-speaking countries of the Caribbean or Central or South America, or from Spain.

If you fill the **Yes, other Spanish/Hispanic** circle, print one group. A person who is not of Spanish/Hispanic origin should answer this question by filling the **No (not Spanish/Hispanic)** circle. Note that the term **"Mexican-Am."** refers only to persons of Mexican origin or ancestry.

All persons, regardless of citizenship status, should answer this question.

## Instructions for Question H1a through H1b

- H1a. Refer to the list of persons you entered in question 1a on page 1. If you left anyone out of your list because you were not sure if the person(s) should be listed, answer question H1a as Yes. Then enter the name(s) and reason(s) why you did not list the person(s) on the lines provided. Otherwise, answer question H1a as No.
  - b. If you included anyone on your list even though you were not sure that you should list the person(s), answer question H1b as Yes. Then enter the name(s) and reason(s) why you listed the person(s) on the lines provided. Otherwise, answer question H1b as No.

### Instructions for Questions H2 through H7b

#### **H2.** Fill only one circle.

Count all occupied and vacant apartments in the house or building. Do not count stores or office space.

Detached means there is open space on all sides, or the house is joined only to a shed or garage. Attached means that the house is joined to another house or building by at least one wall that goes from ground to roof. An example of A one-family house attached to one or more houses is a house in a row of houses attached to one another.

A mobile home or trailer that has had one or more rooms added or built onto it should be counted as a *one-family detached house*; a porch or shed is not considered a room.

- H3. Count only whole rooms in your house, apartment, or mobile home used for living purposes, such as living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, family rooms, etc. Do not count bathrooms, kitchenettes, strip or pullman kitchens, utility rooms, foyers, halls, half-rooms, porches, balconies, unfinished attics, unfinished basements, or other unfinished space used for storage.
- H4. Housing is owned if the owner or co-owner lives in it. Mark Owned by you or someone in this household with a mortgage or loan if the house, apartment, or mobile home is mortgaged or there is a contract to purchase. Mark Owned by you or someone in this household free and clear (without a mortgage) if there is no mortgage or other debt. If the house, apartment, or mobile home is owned but the land is rented, mark this question to show the status of the house, apartment, or mobile home.

Mark **Rented for cash rent** if any money rent is paid, even if the rent is paid by persons who are not members of your household, or by a federal, state, or local government agency.

Mark **Occupied without payment of cash rent** if the unit is **not** owned or being bought by the occupants and if money rent is **not** paid or contracted. The unit may be owned by friends or relatives who live elsewhere and who allow occupancy without charge. A house or apartment may be provided as part of wages or salary. Examples are: caretaker's or janitor's house or apartment; parsonages; tenant farmer or sharecropper houses for which the occupants do not pay cash rent; or military housing.

- **H5a.** Answer H5a and H5b if you live in a one-family house or a mobile home; include only land that you own or rent.
  - b. A business is easily recognized from the outside; for example, a grocery store or barber shop. A medical office is a doctor's or dentist's office regularly visited by patients.
- H6. If this is a house, include the value of the house, the land it is on, and any other structures on the same property. If the house is owned but the land is rented, estimate the combined value of the house and the land. If this is a condominium unit, estimate the value for your house or apartment including your share of the common elements. If this is a mobile home, include the value of the mobile home and the value of the land. If you rent the land, estimate the value of the rented land and add it to the value of the mobile home.
- **H7a.** Report the rent agreed to or contracted for, even if the rent for your house, apartment, or mobile home is unpaid or paid by someone else.

If rent is paid:	Multiply rent by:	If rent is paid:	Divide rent by:
By the day	30	4 times a year .	3
By the week	4	2 times a year .	6
Every other we	ek 2	Once a year	

**b.** Answer **Yes** if meals are included in the monthly rent payment, or you must contract for meals or a meal plan in order to live in this building.

### Instructions for Questions H8 through H19b

- H8. The person listed in column 1 refers to the person listed in the first column on page 2. This person should be the household member (or one of the members) in whose name the house, apartment, or mobile home is owned, being bought, or rented. If there is no such person, any adult household member can be the person in column 1. Mark when this person last moved into this house, apartment, or mobile home.
- H9. Include all rooms intended to be used as bedrooms in this house, apartment, or mobile home, even if they are currently being used for other purposes.
- H10. Mark Yes, have all three facilities if you have all the facilities mentioned; all facilities must be in your house, apartment, or mobile home, but not necessarily in the same room. Consider that you have hot water even if you have it only part of the time. Mark No if any of the three facilities is not present.
- H11. The kitchen sink, stove, and refrigerator must be located in the building but do not have to be in the same room. Portable cooking equipment is not considered as a range or cookstove.
- H12. Answer Yes only if the telephone is located in your house, apartment, or mobile home.
- H13. Count company cars (including police cars and taxicabs) and company trucks of one-ton capacity or less that are regularly kept at home and used by household members for nonbusiness purposes. Do not count cars or trucks permanently out of working order.
- H14. Fill the circle for the fuel used most to heat your house, apartment, or mobile home. In buildings containing more than one apartment you may obtain this information from the owner, manager, or janitor.

**Solar energy** is provided by a system that collects, stores, and distributes heat from the sun. **Other fuel** includes any fuel not separately listed; for example, purchased steam, fuel briquettes, waste material, etc.

H15. If a well provides water for five or more houses, apartments, or mobile homes, mark A public system. If a well provides water for four or fewer houses, apartments, or mobile homes, fill one of the circles for Individual well.

**Drilled wells**, or small diameter wells, are usually less than  $1^{1/2}$  feet in diameter. **Dug wells** are generally hand dug and are larger than  $1^{1/2}$  feet wide.

- H16. A public sewer may be operated by a government body or private organization. A septic tank or cesspool is an underground tank or pit used for disposal of sewage.
- H17. Fill the circle corresponding to the period in which the original construction was completed, not the time of any later remodeling, additions, or conversions. In buildings containing more than one apartment, the owner, manager, or janitor may be of help in determining when the building was built.

If you live in a houseboat or a trailer or mobile home, fill the circle corresponding to the model year in which it was manufactured.

If you do not know the period when the building was first constructed, fill the circle for **Don't know**.

- H18. A condominium is a type of ownership in which the apartments, houses, or mobile homes in a building or development are individually owned, but the common areas, such as lobbies, halls, etc., are jointly owned. Cooperative occupants should mark No.
- **H19a.** Answer H19a and H19b if you live in a one-family house or mobile home.
  - b. This property is the acreage on which the house is located; it includes adjoining land you rent for your use. Report sales made in 1989 from this property by you or previous occupants.

## Instructions for Questions H20 through H26

**H20.** If your house or apartment is rented, enter the costs for utilities and fuels **only if** you pay for them in addition to the rent entered in H7a.

If you live in a condominium, enter the costs for utilities and fuels **only if you** pay for them in addition to your condominium fee.

If your fuel and utility costs are already included in your rent or condominium fee, fill the **Included in rent or in condominium fee** circle. Do not enter any dollar amounts.

The amounts to be reported should be the total amount for the past 12 months. Estimate as closely as possible when exact costs are not known. If you have lived in this house or apartment less than 1 year, estimate the yearly cost.

Report amounts even if your bills are unpaid or paid by someone else. If the bills include utilities or fuel used also by another apartment or a business establishment, estimate the amounts for your own house or apartment. If gas and electricity are billed together, enter the combined amount on the electricity line and bracket [ ] the two utilities.

- H21. Report taxes for all taxing jurisdictions (city or town, county, state, school district, etc.) even if they are included in your mortgage payment, not yet paid or paid by someone else, or are delinquent. Do not include taxes past due from previous years.
- **H22.** When premiums are paid on other than a yearly basis, convert to a yearly basis. Enter the yearly amount even if no payment was made during the past 12 months.
- **H23a.** The word *mortgage* is used as a general term to indicate all types of loans that are secured by real estate.
  - b. Enter a monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see the instructions for H7a to change it to a monthly amount.

Include payments on first mortgages and contracts to purchase only. Payments for second or junior mortgages and home equity loans should be reported in H24b.

- **H24a.** A second or junior mortgage or home equity loan is secured by real estate.
  - b. Enter a monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see instructions for H7a and change it to a monthly amount. Include payments on all second or junior mortgages or home equity loans.
- H25. A condominium fee is normally assessed by the condominium owners' association for the purpose of improving and maintaining the common areas. Enter a monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see the instructions for H7a on how to change it to a monthly amount.
- H26. Report amount even if your bills are unpaid or paid by someone else. Include payments for personal property taxes, land or site rent, registration fees and license fees. Do not include real estate taxes already reported in H21. The amount to be reported should be the total amount for an entire 12-month billing period even if made in two or more installments. Estimate as closely as possible when exact costs are not known.

## Instructions for Question 8

**8.** For persons born in the United States:

Print the name of the State in which this person was born. If the person was born in Washington, D.C., print District of Columbia. If the person was born in a U.S. territory or commonwealth, print Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, or Northern Marianas.

For persons born outside the United States:

Print the name of the foreign country or area where the person was born. Use current boundaries, not boundaries at the time of the person's birth. Specify whether Northern Ireland or the Republic of Ireland (Eire); East or West Germany; North or South Korea; England, Scotland, or Wales (not Great Britain or United Kingdom). Specify the particular country or island in the Caribbean (not, for example, West Indies).

## Instructions for Questions 9 through 13

- 9. A person should fill the Yes, U.S. citizen by naturalization circle only if he/she has completed the naturalization process and is now a United States citizen. If the person was born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas, he/she should fill the Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas circle. If the person was born outside the United States (or at sea) and has at least one American parent, he/she should fill the Yes, born abroad of American parent or parents circle.
- 10. If the person has entered the United States (that is, the 50 states and the District of Columbia) more than once, fill the circle for the latest year he/she came to stav.
- Do not include enrollment in a trade or business school, company training, or tutoring unless the course would be accepted for credit at a regular elementary school, high school, or college.

A *public school* is any school or college that is controlled and supported primarily by a local, county, State, or Federal Government. Schools are private if supported and controlled primarily by religious organizations or other private groups.

12. Mark the category for the highest grade or level of schooling the person has successfully completed or the highest degree the person received. If the person is enrolled in school, mark the category containing the highest grade completed (the grade previous to the grade in which enrolled). Schooling completed in foreign or ungraded schools should be reported as the equivalent level of schooling in the regular American school system.

Persons who completed high school by passing an equivalency test, such as the General Educational Development (GED) examination, and did not attend college, should fill the circle for high school graduate.

Do not include vocational certificates or diplomas from vocational, trade, or business schools or colleges unless they were college level associate degrees or higher.

Some examples of *professional school degrees* include medicine, dentistry, chiropractic, optometry, osteopathic medicine, pharmacy, podiatry, veterinary medicine, law, and theology. Do not include barber school, cosmetology, or other training for a specific trade.

Do not include honorary degrees awarded by colleges and universities to individuals for their accomplishments. Include only "earned" degrees.

13. Print the ancestry group. Ancestry refers to the person's ethnic origin or descent, "roots," or heritage. Ancestry also may refer to the country of birth of the person or the person's parents or ancestors before their arrival in the United States. All persons, regardless of citizenship status, should answer this question.

Persons who have more than one origin and cannot identify with a single ancestry group may report two ancestry groups (for example, German-Irish).

Be specific. For example, print whether West Indian, Asian Indian, or American Indian. West Indian includes persons whose ancestors came from Jamaica, Trinidad, Haiti, etc. Distinguish Cape Verdean from Portuguese; French Canadian from Canadian; and Dominican Republic from Dominica Island.

A religious group should not be reported as a person's ancestry.

### Instructions for **Questions 14a through 19**

- 14a. Mark Yes if this person lived in this same house or apartment on April 1, 1985, even if he/she moved away and came back since then. Mark No if this person lived in the same building but in a different apartment (or in the same mobile home or trailer but on a different lot or trailer site).
  - **b.** If this person lived in a different house or apartment on April 1, 1985, give the location of this person's usual home at that time.

#### Part (1)

If the person lived in the United States on April 1, 1985, print the name of the State (or District of Columbia) where he or she lived. Continue with parts (2) through (4).

If the person lived in a U.S. territory or commonwealth, print the name of the territory or commonwealth, such as Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, or Northern Marianas. Then go to question 15a.

If the person lived outside the United States, print the name of the foreign country or area where he or she lived. Specify whether Northern Ireland or the Republic of Ireland (Eire); East or West Germany; North or South Korea; England, Scotland or Wales (not Great Britain or United Kingdom). Specify the particular country or island in the Caribbean (not, for example, West Indies). Then go to question 15a.

#### Part (2)

If the person lived in Louisiana, print the parish name. If the person lived in Alaska, print the borough name. If the person lived in New York city and the county name is not known, print the borough name. If the person lived in an independent city (not in any county) or in Washington, D.C., leave blank and enter the city name in part (3).

#### Part (3)

If the person lived in New England, print the name of the town rather than the village name, unless the name of the town is not known. If the person lived outside the limits or boundaries of any city or town, print the name of the post office or the nearest town and mark **No**, **lived outside the city/town limits** in part (4).

#### Part (4)

Mark Yes if the location is now inside the city/town limits even if it was not inside the limits on April 1, 1985; that is, if the area was annexed by the city/town since that time.

**15.** Mark **Yes** if the person sometimes or always speaks a language other than English at home.

Do not mark **Yes** for a language spoken only at school or if speaking is limited to a few expressions or slang.

Print the name of the language spoken at home. If this person speaks more than one non-English language and cannot determine which is spoken more often, report the first language the person learned to speak.

- 17a. For a person with service in the National Guard or a military reserve unit, fill one of the two Yes, active duty circles if and only if the person has ever been called up for active duty other than training; otherwise, mark Yes, service in Reserves or National Guard only. For a person whose only service was as a civilian employee or volunteer for the Red Cross, USO, Public Health Service, or War or Defense Department, mark No. Count World War II Merchant Marine Seaman service as active duty; do not count other Merchant Marine service as active duty.
- 18. Mark Yes to part (a) if a health condition substantially limits this person in his or her choice of occupation or if the condition limits the amount of work that can be accomplished in a given period of time. Mark Yes to part (b) if the health condition prevents this person from holding any significant employment.
- 19. Consider a person to have difficulty with these activities if any of the following situations apply: (1) it takes extra time or extra effort for the person to perform one or more of the activities, (2) there are times when the person cannot perform one or more of the activities, or (3) the person is completely unable to perform one or more of the activities.

## Instructions for Questions 20 through 23b

- 20. Count all children born alive, including any who have died (even shortly after birth) or who no longer live with you. Do not include miscarriages or stillborn children or any adopted, foster, or stepchildren.
- **21a.** Count as work Mark **Yes**:
  - Work for someone else for wages, salary, piece rate, commission, tips, or payments "in kind" (for example, food, lodging received as payment for work performed).
  - Work in own business, professional practice, or farm.
  - Any work in a family business or farm, paid or not.
  - Any part-time work including babysitting, paper routes, etc.
  - Active duty in Armed Forces.

Do not count as work — Mark No:

- Housework or yard work at home.
- Unpaid volunteer work.
- School work.
- Work done as a resident of an institution.
- **22a.** Include the street type (for example, St., Road, Ave.) and the street direction (if a direction such as "North" is part of the address). For example, print 1239 N. Main St. or 1239 Main St., N.W. not just 1239 Main.

If the only known address is a post office box, give a description of the work location. For example, print the name of the building or shopping center where the person works, the nearest intersection, the nearest street where the workplace is located, etc. DO NOT GIVE A POST OFFICE BOX NUMBER.

If the person worked at a military installation or military base that has no street address, report the name of the military installation or base.

If the person worked at several locations, but reported to the same location each day to begin work, print the address of the location where he or she reported. If the person did not report to the same location each day to begin work, print the address of the location where he or she worked most last week

If the person's employer operates in more than one location (such as a grocery store chain or public school system), print the exact address of the location or branch where the person worked. If the exact address of a school is not known, print the name of the school.

If the person worked on a college or university campus and the exact address of the workplace is not known, print the name of the building where he or she worked.

**d.** If the person worked in New York city and the county is not known, print the name of the borough where the person worked.

If the person worked in Louisiana, print the name of the parish where the person worked.

If the person worked in Alaska, print the name of the borough where the person worked.

- e. If the person worked in a foreign country or Puerto Rico, Guam, etc., print the name of the country in 22e and leave the other parts of question 22 blank.
- 23a. If the person usually used more than one type of transportation to get to work (for example, rode the bus and transferred to the subway), fill the circle of the one method of transportation that he/she used for most of the distance during the trip.
  - **b.** If the person was driven to work by someone who then drove back home or to a nonwork destination, fill the circle for **Drove alone**.

DO NOT include persons who rode to school or some other nonwork destination in the count of persons who rode in the vehicle.

## Instructions for Questions 24a through 30

- **24a.** Give the time of day the person usually *left home to go to work*. DO NOT give the time that the person usually began his or her work.
  - If the person usually left home to go to work sometime between 12:00 o'clock midnight and 12:00 o'clock noon, fill the a.m. circle.
  - If the person usually left home to go to work sometime between 12:00 o'clock noon and 12:00 o'clock midnight, fill the **p.m.** circle.
  - **b.** Travel time is from door to door. Include time taken waiting for public transportation or picking up passengers in a carpool.
- 25. If the person works only during certain seasons or on a day-by-day basis when work is available, mark No.
- 26a. Mark Yes if the person tried to get a job or to start a business or professional practice at any time in the last 4 weeks; for example, registered at an employment office, went to a job interview, placed or answered ads, or did anything toward starting a business or professional practice.
  - **b.** Mark **No, already has a job** if the person was on layoff or was expecting to report to a job within 30 days.
    - Mark **No, temporarily ill** if the person expects to be able to work within 30 days.
    - Mark **No, other reasons** if the person could not have taken a job because he or she was going to school, taking care of children, etc.
- 27. Look at the instructions for question 21a to see what to count as work. Mark Never worked if the person: (1) never worked at any kind of job or business, either full or part time, (2) never did any work, with or without pay, in a family business or farm, and (3) never served in the Armed Forces.
- **28a.** If the person worked for a company, business, or government agency, print the name of the company, not the name of the person's supervisor. If the person worked for an individual or a business that had no company name, print the name of the individual worked for. If the person worked in his/her own business, print "self-employed."
  - b. Print two or more words to tell what the business, industry, or individual employer named in 28a did. If there is more than one activity, describe only the major activity at the place where the person worked. Enter what is made, what is sold, or what service is given.

Some examples of what to enter:

### Enter a description like the following —

na

Metal furniture manufacturing Retail grocery store Do not enter –
Furniture company
Grocery store

Retail grocery store
Petroleum refining
Cattle ranch

Oil company Ranch

**29.** Print two or more words to describe the kind of work the person did. If the person was a trainee, apprentice, or helper, include that in the description. Some examples of what to enter:

### Enter a description like the following -

Do not enter -

Production clerk Carpenter's helper Auto engine mechanic Registered nurse Clerk Helper Mechanic Nurse

**30.** Mark **Employee of a PRIVATE NOT-FOR-PROFIT . . . organization** if the person worked for a cooperative, credit union, mutual insurance company, or similar organization.

Employees of foreign governments, the United Nations, and other international organizations should mark **PRIVATE NOT-FOR-PROFIT . . . organization**.

For persons who worked at a public school, college or university, mark the appropriate government category; for example, mark **State GOVERNMENT employee** for a state university, or mark **Local GOVERNMENT employee** for a county-run community college or a city-run public school.

## Instructions for Questions 31a through 32h

- **31a.** Look at the instructions for question 21a to see what to count as work.
  - **b.** Count every week in which the person did any work at all, even for an hour.
- **32.** Fill the **Yes** or **No** circle for each part and enter the amount received during 1989.

If income from any source was received jointly by household members, report, if possible, the appropriate share for each person; otherwise, report the whole amount for only one person and fill the **No** circle for the other person.

- a. Include wages and salaries from all jobs before deductions. Be sure to include any tips, commissions, or bonuses. Owners of incorporated businesses should enter their salary here. Military personnel should include base pay plus cash housing and/or subsistence allowance, flight pay, uniform allotments, reenlistment bonuses, etc.
- b. Include NONFARM profit (or loss) from self-employment in sole proprietorships and partnerships. Exclude profit (or loss) of incorporated businesses you own.
- C. Include FARM profit (or loss) from self-employment in sole proprietorships and partnerships. Exclude profit (or loss) of incorporated farm businesses you own. Also exclude amounts from land rented for cash but include amounts from land rented for shares.
- d. Include interest received or credited to checking and savings accounts, money market funds, certificates of deposit (CDs), IRAs, KEOGHs, and government bonds.

Include dividends received, credited, or reinvested from ownership of stocks or mutual funds.

Include profit (or loss) from royalties and the rental of land, buildings or real estate, or from roomers or boarders. Income received by self-employed persons whose *primary* source of income is from renting property or from royalties should be included in questions 32b or 32c above. Include regular payments from an estate or trust fund.

- e. Include Social Security (and/or Railroad Retirement) payments to retired persons, to dependents of deceased insured workers, and to disabled workers before Medicare deductions.
- f. Include Supplemental Security Income received by aged, blind, or disabled persons, Aid to Families with Dependent Children, or income from other government programs such as general or emergency assistance. Do not include assistance received from private charities. Exclude assistance to pay for heating (cooling) costs.
- g. Include retirement, disability, or survivor benefits received from companies and unions; Federal, State, and local governments, and the U.S. military. Include regular income from annuities and IRA or KEOGH retirement plans.
- h. Include Veterans' (VA) disability compensation and educational assistance payments (VEAP), unemployment compensation, child support or alimony, and all other regular payments such as Armed Forces transfer payments; assistance from private charities; regular contributions from persons not living in the household, etc.

Do not include the following as income in any item:

- Refunds or rebates of any kind
- Withdrawals from savings of any kind
- Capital gains or losses from the sale of homes, shares of stock, etc.
- Inheritances or insurance settlements
- Any type of loan
- Pay in-kind such as food, free rent, etc.

#### What the Census Is About -

Some Questions and Answers

#### Why are we taking a census?

The most important reason for taking a decennial census is to determine how many representatives each state will have in Congress.

#### What does the Census Bureau do with the information you provide?

The individual information collected in the census is grouped together into statistical totals. Information such as the number of persons in a given area, their ages, educational background, the characteristics of their housing, etc., enable government, business, and industry to plan more effectively.

#### How long have we been taking the census?

The first census was taken in 1790 in accordance with the requirement in the first article of the constitution. A census has been taken every 10 years since. The 1990 Decennial Census marks the 200th anniversary of the census.

#### How are you being counted?

Census forms are delivered to all households a few days before census day. Households are requested to fill out the form and mail it back to the census office.

#### Why the Census Asks Certain Questions

#### Here are a few reasons for asking some of the questions.

It is as important to get information about people and their houses as it is to count them.

#### Name?

Names help make sure that everyone in a household is counted, but that no one is counted twice.

#### Value or rent?

Government and planning agencies use answers to these questions in combination with other information to develop housing programs to meet the needs of people at different economic levels.

#### Complete plumbing?

This question gives information on the quality of housing. The data are used with other statistics to show how the "level of living" compares in various areas and how it has changed over time.

#### Place of birth?

This question provides information used to study long-term trends as to where people move and to study migration patterns and differences in growth patterns.

#### Job?

Answers to the questions about the jobs people hold provide information on the extent and types of employment in different areas of the country. From this information, training programs can be developed and the need for new industries can be determined.

#### Income?

Income, more than anything else, determines how families or persons live. Income information makes it possible to compare the economic levels of different areas.

CENSUS '90

### OFFICIAL 1990 U.S. CENSUS FORM



Thank you for taking time to complete and return this census questionnaire. It's important to you, your community, and the Nation.

#### The law requires answers but guarantees privacy.

By law (Title 13, U.S. Code), you're required to answer the census questions to the best of your knowledge. However, the same law guarantees that your census form remains confidential. For 72 years—or until the year 2062—only Census Bureau employees can see your form. No one else—no other government body, no police department, no court system or welfare agency—is permitted to see this confidential information under any circumstances.

#### How to get started-and get help.

Start by listing on the next page the names of all the people who live in your home. Please answer all questions with a black lead pencil. You'll find detailed instructions for answering the census in the enclosed guide. If you need additional help, call the toll-free telephone number to the left, near your address.

#### Please answer and return your form promptly.

Complete your form and return it by April 1, 1990 in the postage-paid envelope provided. Avoid the inconvenience of having a census taker visit your home.

Again, thank you for answering the 1990 Census. Remember: Return the completed form by April 1, 1990.

#### Para personas de habla hispana -

(For Spanish-speaking persons)

Si usted desea un cuestionario del censo en español, llame sin cargo alguno al siguiente número: 1-800-CUENTAN (o sea 1-800-283-6826)

U.S. Department of Commerce BUREAU OF THE CENSUS FORM D-2

OMB No. 0607-0628 Approval Expires 07/31/91

#### Page 1

The 1990 census must count every person at his or her "usual residence." This means the place where the person lives and sleeps most of the time.

1a. List on the numbered lines below the name of each person living here on Sunday, April 1, including all persons staying here who have no other home. If EVERYONE at this address is staying here temporarily and usually lives somewhere else, follow the instructions given in question 1b below.

#### Include

- Everyone who usually lives here such as family members, housemates and roommates, foster children, roomers, boarders, and live-in employees
- Persons who are temporarily away on a business trip, on vacation, or in a general hospital
- College students who stay here while attending college
- Persons in the Armed Forces who live here
- Newborn babies still in the hospital
- Children in boarding schools below the college level
- Persons who stay here most of the week while working even if they have a home somewhere else
- Persons with no other home who are staying here on April 1

#### Do NOT include

- Persons who usually live somewhere else
- Persons who are away in an institution such as a prison, mental hospital, or a nursing home
- College students who live somewhere else while attending college
- Persons in the Armed Forces who live somewhere else
- Persons who stay somewhere else most of the week while working

Print last name, first name, and middle initial for each person. Begin on line 1 with the household member (or one of the household members) in whose name this house or apartment is owned, being bought, or rented. If there is no such person, start on line 1 with any adult household member.

LAST	FIRST	INITIAL	LAST	FIRST	INITIAL
1			7		
2			8		
3			9		
4			10		
5			11		
6			12		

1b. If EVERYONE is staying here only temporarily and usually lives somewhere else, list the name of each person on the numbered lines above, fill this circle — and print their usual address below. DO NOT PRINT THE ADDRESS LISTED ON THE FRONT COVER.

House number	Street or road/Rural route and box number	Apartment number	
City	State	ZIP Code	
County or foreign country	Names of nearest intersecting streets or	roads	

NOW PLEASE OPEN THE FLAP TO PAGE 2 AND ANSWER ALL QUESTIONS FOR THE FIRST 7 PEOPLE LISTED. USE A BLACK LEAD PENCIL ONLY.

Page 2 PLEASE ALSO ANSWER HOUSING QUESTIONS ON PAGE 3 PERSON 1 PERSON 2 Please fill one column for each person listed in Middle initial First name Middle initial First name Question 1a on page 1. 2. How is this person related If a RELATIVE of Person 1: to PERSON 1? Husband/wife O Brother/sister START in this column with the household Fill ONE circle for each person. O Natural-born Father/mother member (or one of the members) in whose name or adopted Grandchild  $\bigcirc$ If Other relative of person in column 1, the home is owned, being bought, or rented. Other relative son/daughter fill circle and print exact relationship, such O Stepson/ as mother-in-law, grandparent, son-in-law, If there is no such person, start in this column with stepdaughter niece, cousin, and so on. any adult household member. If NOT RELATED to Person 1: Roomer, boarder, Unmarried or foster child partner Housemate. Other nonrelative roommate 3. Sex Male O Female Male Female Fill ONE circle for each person. 4. Race White O White Fill ONE circle for the race that the person O Black or Negro Black or Negro considers himself/herself to be. Indian (Amer.) (Print the name of the Indian (Amer.) (Print the name of the enrolled or principal tribe.) enrolled or principal tribe.) If Indian (Amer.), print the name of the enrolled or principal tribe. O Eskimo Eskimo Aleut 0 0 Aleut Asian or Pacific Islander (API) Asian or Pacific Islander (API)  $\circ$ Chinese Japanese Chinese Japanese Filipino 0 Asian Indian Filipino Asian Indian 0 If Other Asian or Pacific Islander (API), Hawaiian 0 Samoan Hawaiian 0 Samoan print one group, for example: Hmong, 0 Korean  $\circ$ Guamanian  $\bigcirc$ Korean  $\cap$ Guamanian Fijian, Laotian, Thai, Tongan, Pakistani, Other API Other API Vietnamese Vietnamese Cambodian, and so on. If Other race, print race. . Other race (Print race) Other race (Print race) a. Age b. Year of birth b. Year of birth a. Age 5. Age and year of birth a. Print each person's age at last birthday. Fill in the matching circle below each box.  $0 \circ 0 \circ 0 \circ$ 8 0 0 0 0 0 0 0 0 0 8  $\circ$  0  $\circ$  0  $\circ$ 101010 901010 101010 01010 2 0 2 0 2020 2020 2020 b. Print each person's year of birth and fill the 3 0 3 0 3 0 3 0 3030 3 0 3 0 matching circle below each box. 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 5 0 5 0 5050 5 0 5 0 5050 6 0 6 0 6 0 6 0 6 0 6 0 6 0 6 0 7 0 7 0 7 0 7 0 7 0 7 0 7 0 7 0 8 0 8 0 8 0 8 0 8080 8080 9090 9 0 9 0 9090 9090 6. Marital status Now married Separated Now married Separated Fill ONE circle for each person. Widowed Never married  $\bigcirc$ Widowed O Never married O Divorced Divorced 7. Is this person of Spanish/Hispanic origin? No (not Spanish/Hispanic)  $\bigcirc$ O No (not Spanish/Hispanic) Yes, Mexican, Mexican-Am., Chicano Fill ONE circle for each person. Yes, Mexican, Mexican-Am., Chicano O Yes, Puerto Rican Yes, Puerto Rican Yes, Cuban Yes, Cuban 0 Yes, other Spanish/Hispanic Yes, other Spanish/Hispanic (Print one group, for example: Argentinean (Print one group, for example: Argentinean, Colombian, Dominican, Nicaraguan, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.) Salvadoran, Spaniard, and so on.) If Yes, other Spanish/Hispanic, print one group. 0 0 FOR CENSUS USE -

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	PERSON 7	Pa NOW PLEASE ANSWER QUESTIONS H1a—H26 FOR THIS HOUSEHOLD
Last nam		H1a. Did you leave anyone out of your list of persons for Question 1a on page 1 because you were not sure if the person should be listed — for example, someone  If this is a ONE-FAMILY HOUSE —  H5a. Is this house on ten or more acres?
0	ELATIVE of Person 1:  Husband/wife	temporarily away on a business trip or vacation, a newborn baby still in the hospital, or a person who stays here once in a while and has no other home?  Yes, please print the name(s)
0	son/daughter Other relative Stepson/ stepdaughter	Answer only if you or someone in this household OWNS  OR IS BUYING this house or apartment —
	RELATED to Person 1:  Roomer, boarder, O Unmarried	b. Did you include anyone in your list of persons for Question 1a on page 1 even though you were not sure  H6. What is the value of this property; that is, how much do you think this house and lot or condominium unit would sell for if it were for sale?
0	or foster child partner  Housemate, Other nonrelative	that the person should be listed — for example, a visitor who is staying here temporarily or a person who usually lives somewhere else?  Less than \$10,000   \$70,000 to \$74,999  \$75,000 to \$79,999
0	Male O Female	Yes, please print the name(s) No \$15,000 to \$19,999 \$80,000 to \$89,999 and reason(s).
000	White Black or Negro Indian (Amer.) (Print the name of the enrolled or principal tribe.)  Eskimo Aleut Asian or Pacific Islander (API)  Chinese  Japanese Filipino  Asian Indian	\$25,000 to \$29,999 \$100,000 to \$124,999 \$30,000 to \$34,999 \$125,000 to \$149,999 \$35,000 to \$39,999 \$150,000 to \$174,999 \$35,000 to \$39,999 \$150,000 to \$174,999 \$35,000 to \$39,999 \$150,000 to \$174,999 \$35,000 to \$44,999 \$175,000 to \$174,999 \$40,000 to \$44,999 \$200,000 to \$49,999 \$55,000 to \$59,999 \$300,000 to \$49,999 \$55,000 to \$59,999 \$300,000 to \$49,999 \$300,000 to \$499,999 \$565,000 to \$64,999 \$500,000 to \$499,999 \$500,000 to \$4
	Hawaiian Samoan Korean Guamanian	A building with 10 to 19 apartments  A building with 10 to 19 apartments  Answer only if you PAY RENT for this house or apartment —  H7a. What is the monthly rent?
0	Vietnamese Other API Other race (Print race)	○ A building with 50 or more apartments ○ Other  ○ Less than \$80
a. Age		H3. How many rooms do you have in this house or apartment?  Do NOT count bathrooms, porches, balconies, foyers, halls, or half-rooms.  □ 1 room □ □ 4 rooms □ 7 rooms □ \$150 to \$124 □ \$425 to \$449 □ \$450 to \$474 □ \$475 to \$499 □ \$175 to \$199 □ \$500 to \$524 □ \$525 to \$549 □ \$525 to \$549 □ \$525 to \$549 □ \$525 to \$549 □ \$550 to \$599 □ \$600 to
	2 · 2 · 0 3 · 3 · 0 4 · 4 · 0 5 · 5 · 5 · 0 6 · 6 · 0 7 · 7 · 0	15
	8 0 8 0 8 0 8 0 9 0 9 0 9 0 9 0	<ul> <li>Rented for cash rent?</li> <li>Occupied without payment of cash rent?</li> <li>Yes</li> <li>No</li> </ul>
0	Now married O Separated	FOR CENSUS USE  A. Total B. Type of unit D. Months vacant G. DO ID
0	Widowed O Never married Divorced  No (not Spanish/Hispanic)	persons Occupied Vacant  O First form O Regular  O First form O Regular  O Less than 1 O 6 up to 12  O 1 up to 2 O 12 up to 24  O 2 up to 6 O 24 or more
0	Yes, Mexican, Mexican-Am., Chicano Yes, Puerto Rican	O Contri O Usual home elsewhere elsewhere  E. Complete after  O O O O O O O O O
	Yes, Cuban Yes, other Spanish/Hispanic (Print one group, for example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.)	S   S   S   S   S   S   S   S   S   S
0		8
		O 163 O 160 O 16 O 7 O 111

JOBNAME: No Job Name PAGE: 35 SESS: 22 OUTPUT: Tue Sep 28 16:51:13 1993 /pssw02/ disk2/ 90dec/ cphe/ 1/ appa PLEASE ALSO ANSWER THESE Page 4 H8. When did the person listed in column 1 on H14. Which FUEL is used MOST for heating this H20. What are the yearly costs of utilities and fuels for this house or apartment? page 2 move into this house or apartment? house or apartment? If you have lived here less than 1 year, O 1989 or 1990 O Gas: from underground pipes estimate the yearly cost. O 1985 to 1988 serving the neighborhood O 1980 to 1984 Gas: bottled, tank, or LP a. Electricity O 1970 to 1979 Electricity O 1960 to 1969 Fuel oil, kerosene, etc. 1959 or earlier O Coal or coke Wood 0 Solar energy 00 Other fuel H9. How many bedrooms do you have; that is, how Yearly cost — Dollars O No fuel used many bedrooms would you list if this house or apartment were on the market for sale or rent? OR H15. Do you get water from -O No bedroom O Included in rent or in condominium fee 0 1 bedroom O A public system such as a city water O No charge or electricity not used O 2 bedrooms department, or private company? O 3 bedrooms An individual drilled well? O 4 bedrooms O An individual dug well? 5 or more bedrooms b. Gas Some other source such as a spring, creek, river, cistem, etc.? H10. Do you have COMPLETE plumbing facilities H16. Is this building connected to a public sewer? 8 in this house or apartment; that is, 1) hot and ? cold piped water, 2) a flush toilet, and 3) a O Yes, connected to public sewer .00 6 bathtub or shower? O No, connected to septic tank or cesspool Yearly cost — Dollars 5 O No, use other means 4 O Yes, have all three facilities 3 OR O No H17. About when was this building first built? S • O Included in rent or in condominium fee 0 O 1989 or 1990 O No charge or gas not used O 1985 to 1988 O 1980 to 1984 H11. Do you have COMPLETE kitchen facilities; 9 O 1970 to 1979 that is, 1) a sink with piped water, 2) a range c. Water O 1960 to 1969 8 or cookstove, and 3) a refrigerator? 7 O 1950 to 1959 6 0 1940 to 1949 O Yes 5 0 1939 or earlier O No • O Don't know 3 00 S Yearly cost — Dollars H18. Is this house or apartment part of a

H12. Do you have a telephone in this house or apartment?

- O Yes
- O No

condominium?

H19a. Is this house on less than 1 acre?

○ Yes — Skip to H20

- O Yes
- O No

If you live in an apartment building, skip to H20.

H13. How many automobiles, vans, and trucks of one-ton capacity or less are kept at home for use by members of your household?

- O None
- 0 1 0 2
- 0 3
- 0 4
- 0 5
- 0 6 O 7 or more

b. In 1989, what were the actual sales of all agricultural products from this property?

O None

O No

- O \$1 to \$999
- 0 \$1,000 to \$2,499 O \$2,500 to \$4,999
- O \$5,000 to \$9,999
- O \$10,000 or more

		į
<b>¦\$</b>		.00

OR

d. Oil, coal, kerosene, wood, etc.

No charge

O Included in rent or in condominium fee

OR

Yearly cost - Dollars

- O Included in rent or in condominium fee
- O No charge or these fuels not used

Ø

	H23a. Do you have a mortgage, deed of trust, contract to purchase, or similar debt on THIS property?	H24a. Do you have a second or junior mortgage or a home equity loan on
INSTRUCTION:  Answer questions H21 TO H26, if this is a one-family house, a condominium, or a mobile home that someone in this household OWNS OR IS BUYING; otherwise, go to page 6.	<ul> <li>Yes, mortgage, deed of trust, or similar debt</li> <li>Yes, contract to purchase</li> <li>No — Skip to H24a</li> </ul>	THIS property?  ○ Yes ○ No — Skip to H25
H21. What were the real estate taxes on THIS property last year?	b. How much is your regular monthly mortgage payment on THIS property? Include payment only on first mortgage or contract to purchase.	b. How much is your regular monthly payment on all second or junior mortgages and all home equity loans?
\$ .00 Yearly amount — Dollars	\$ .00 Monthly amount — Dollars  OR  On No regular payment required — Skip to H24a	\$ .00  Monthly amount — Dollars  OR  O No regular payment required
OR  None	c. Does your regular monthly mortgage payment include payments for real estate taxes on THIS property?	Answer ONLY if this is a CONDOMINIUM — H25. What is the monthly condominium fee?
H22. What was the annual payment for fire, hazard, and flood insurance on THIS property?	<ul> <li>Yes, taxes included in payment</li> <li>No, taxes paid separately or taxes not required</li> </ul>	\$ .00 Monthly amount — Dollars
\$ .00 Yearly amount — Dollars  OR	d. Does your regular monthly mortgage payment include payments for fire, hazard, or flood insurance on THIS property?  O Yes, insurance included in payment O No, insurance paid separately or no insurance	Answer ONLY if this is a MOBILE HOME — H26. What was the total cost for personal property taxes, site rent, registration fees and license fees on this mobile home and its site last year? Exclude real estate taxes.  \$ .00 Yearly amount — Dollars
_		Please turn to page 6.

Page	6

#### PLEASE ANSWER THESE QUESTIONS

PERSON 1	14a. Did this person live in this house or apartment	18. Does this person have a physical, mental, or other
	5 years ago (on April 1, 1985)?	health condition that has lasted for 6 or more
Last name First name Middle initial	O Born after April 1, 1985 — Go to questions for	months and which —  a. Limits the kind or amount of work this person can
8. In what U.S. State or foreign country was this	○ Yes — Skip to 15a the next person	do at a job?
person born?	<u> </u>	○ Yes ○ No
,	b. Where did this person live 5 years ago	b. Prevents this person from working at a job?
(Name of State or foreign country; or Puerto Rico, Guam, etc.)	(on April 1, 1985)?	Yes O No
9. Is this person a CITIZEN of the United States?	(1) Name of U.S. State or foreign country —	
O Yes, born in the United States — Skip to 11	<b>/</b> _	19. Because of a health condition that has lasted for 6 or more months, does this person have any
O Yes, born in Puerto Rico, Guam, the	(If outside U.S., print answer above and skip to 15a.)	difficulty —
U.S. Virgin Islands, or Northern Marianas	(2) Name of county in the U.S. –7	a. Going outside the home alone, for example, to
<ul> <li>Yes, born abroad of American parent or parents</li> <li>Yes, U.S. citizen by naturalization</li> </ul>	[2] Name or county in the 0.5.	shop or visit a doctor's office?
No, not a citizen of the United States		O Yes O No
10. When did this person come to the United States	(3) Name of city or town in the U.S.	b. Taking care of his or her own personal needs, such
to stay?	[	as bathing, dressing, or getting around inside the home?
○ 1987 to 1990 ☐ ○ 1970 to 1974		
O 1985 or 1986 O 1965 to 1969	(4) Did this person live inside the city or town limits?	O les O NO
○ 1982 to 1984 ○ 1960 to 1964 ○ 1980 or 1981 ○ 1950 to 1959	O Yes	If this person is a female —  20. How many babies has she ever had, not counting
O 1975 to 1979 O Before 1950	No, lived outside the city/town limits	stillbirths? Do not count her stepchildren or children
11. At any time since February 1, 1990, has this	15a. Does this person speak a language other than	she has adopted.
person attended regular school or college?	English at home?	None 1 2 3 4 5 6 7 8 9 10 11 12 or more 6
Include only nursery school, kindergarten, elementary	○ Yes ○ No — Skip to 16	0 00000000000000
school, and schooling which leads to a high school diploma or a college degree.	b. What is this language? —	21a. Did this person work at any time LAST WEEK?
No, has not attended since February 1	[	Yes — Fill this circle if this person worked full
Yes, public school, public college	(Company)	time or part time. (Count part-time work such
Yes, private school, private college	(For example: Chinese, Italian, Spanish, Vietnamese)  c. How well does this person speak English?	as delivering papers, or helping without pay in a family business or farm. Also count active
12. How much school has this person COMPLETED?	Very well	duty in the Armed Forces.)
Fill ONE circle for the highest level COMPLETED or	O Well O Not at all	○ No — Fill this circle if this person did not work, 8
degree RECEIVED. If currently enrolled, mark the level of previous grade attended or highest degree received.	16. When was this person born?	or did only own housework, school work, or volunteer work. — Skip to 25
No school completed	Born before April 1, 1975 — Go to 17a	b. How many hours did this person work LAST WEEK
O Nursery school	Born April 1, 1975 or later — Go to questions	(at all jobs)? Subtract any time off; add overtime or extra
O Kindergarten	for the next person	hours worked.
<ul><li>1st, 2nd, 3rd, or 4th grade</li><li>5th, 6th, 7th, or 8th grade</li></ul>	17a. Has this person ever been on active-duty military	Hours 2
O 9th grade	service in the Armed Forces of the United States or ever been in the United States military Reserves	© 4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
O 10th grade	or the National Guard? If service was in Reserves or	22. At what location did this person work LAST WEEK?
<ul><li>11th grade</li><li>12th grade, NO DIPLOMA</li></ul>	National Guard only, see instruction guide.	If this person worked at more than one location, print
O HIGH SCHOOL GRADUATE - high school	<ul> <li>Yes, now on active duty</li> </ul>	where he or she worked most last week.
DIPLOMA or the equivalent (For example: GED)	O Yes, on active duty in past, but not now	a. Address (Number and street)
Some college but no degree     Associate degree in college - Occupational program	<ul> <li>Yes, service in Reserves or National</li> <li>Guard only — Skip to 18</li> </ul>	
Associate degree in college - Academic program	○ No — Skip to 18	(If the exact address is not known, give a description of
O Bachelor's degree (For example: BA, AB, BS)	b. Was active-duty military service during —	the location such as the building name or the nearest street or intersection.)
<ul> <li>Master's degree (For example: MA, MS, MEng, MEd, MSW, MBA)</li> </ul>	Fill a circle for each period in which this person served.	b. Name of city, town, or post office —
<ul> <li>Professional school degree (For example: MD,</li> </ul>	O September 1980 or later	o. ratine of city, town, or post office
DDS, DVM, LLB, JD)	O May 1975 to August 1980	
<ul> <li>Doctorate degree</li> <li>(For example: PhD, EdD)</li> </ul>	<ul> <li>Vietnam era (August 1964—April 1975)</li> <li>February 1955—July 1964</li> </ul>	c. Is the work location inside the limits of
	O Korean conflict (June 1950—January 1955)	that city or town?
13. What is this person's ancestry or ethnic origin? (See instruction guide for further information.)	O World War II (September 1940—July 1947)	Yes O No, outside the city/town limits
	<ul><li>World War I (April 1917—November 1918)</li><li>Any other time</li></ul>	d. County 7
Ĺ		//
(For example: German, Italian, Afro-Amer., Croatian,	c. In total, how many years of active-duty military service has this person had?	L
Cape Verdean, Dominican, Ecuadoran, Haitian, Cajun, French Canadian, Jamaican, Korean, Lebanese, Mexican,	· []	e. State 7 f. ZIP Code 7
Nigerian, Irish, Polish, Slovak, Taiwanese, Thai, Ukrainian, etc.)	Years	

R PERSON 1 ON PAGE 2		Page
23a. How did this person usually get to work LAST WEEK? If this person usually used more than one method of transportation during the trip, fill the circle of the one used for most of the distance.  Car, truck, or van Motorcycle Bus or trolley bus Bicycle Streetcar or trolley car Walked Subway or elevated Worked at home Railroad Skip to 28 Ferryboat Other method Taxicab If "car, truck, or van" is marked in 23a, go to 23b. Otherwise, skip to 24a.  b. How many people, including this person, usually rode to work in the car, truck, or van LAST WEEK?  Drove alone 5 people 2 people 6 people 3 people 7 to 9 people	28. Industry or Employer  a. For whom did this person work? If now on active duty in the Armed Forces, fill this circle  and print the branch of the Armed Forces.  (Name of company, business, or other employer)  b. What kind of business or industry was this?  Describe the activity at location where employed.  (For example: hospital, newspaper publishing, mail order house, auto engine manufacturing, retail bakery)  c. Is this mainly — Fill ONE circle  Manufacturing Other (agriculture, Owholesale trade Construction, service, Retail trade Government, etc.)	32. INCOME IN 1989 — Fill the "Yes" circle below for each income source received during 1989. Otherwise, fill the "No" circle. If "Yes," enter the total amount received during 1989. For income received jointly, see instruction guide. If exact amount is not known, please give best estimate. If net income was a loss, write "Loss" above the dollar amount.  a. Wages, salary, commissions, bonuses, or tips from all jobs — Report amount before deductions for taxes, bonds, dues, or other items.  Yes — \$ .00  Annual amount — Dollars  b. Self-employment income from own nonfarm business, including proprietorship and partnership — Report NET income after business expenses.  Yes — .00  No .00
24a. What time did this person usually leave home to go to work LAST WEEK?    O a.m. O p.m.  b. How many minutes did it usually take this person to get from home to work LAST WEEK?    Minutes — Skip to 28	29. Occupation  a. What kind of work was this person doing?  (For example: registered nurse, personnel manager, supervisor of order department, gasoline engine assembler, cake icer)  b. What were this person's most important activities or duties?	Annual amount — Dollars  c. Farm self-employment income — Report NET income after operating expenses. Include earnings as a tenant farmer or sharecropper.  Yes — \$ .00  Annual amount — Dollars
<ul> <li>25. Was this person TEMPORARILY absent or on layoff from a job or business LAST WEEK?</li> <li>Yes, on layoff</li> <li>Yes, on vacation, temporary illness, labor dispute, etc.</li> <li>No</li> </ul>	(For example: patient care, directing hiring policies, supervising order clerks, assembling engines, icing cakes)  30. Was this person — Fill ONE circle  © Employee of a PRIVATE FOR PROFIT company or business or of an individual, for wages, salary, or commissions	No \$ .00  Annual amount — Dollars  e. Social Security or Railroad Retirement  Yes
26a. Has this person been looking for work during the last 4 weeks?  Yes  No - Skip to 27  b. Could this person have taken a job LAST WEEK if one had been offered?  No, already has a job No, temporarily ill No, other reasons (in school, etc.) Yes, could have taken a job	Employee of a PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization Local GOVERNMENT employee (city, county, etc.) State GOVERNMENT employee Federal GOVERNMENT employee SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm Working WITHOUT PAY in family business or farm  31a. Last year (1989), did this person work, even for a few days, at a paid job or in a business or farm? Yes	welfare payments.  Yes
days?  1990 1989 1988 1985 to 1987  28-30. CURRENT OR MOST RECENT JOB ACTIVITY. Describe clearly this person's chief job activity or business last week. If this person had more than one job, describe the one at which this person worked the most hours. If this person had no job or business last week, give information for his/her last job or business since 1985.	No — Skip to 32  b. How many weeks did this person work in 1989? Count paid vacation, paid sick leave, and military service.  Weeks  c. During the weeks WORKED in 1989, how many hours did this person usually work each week?  Hours	such as money from an inheritance or the sale of a home.  Yes No S Annual amount — Dollars  33. What was this person's total income in 1989?  Add entries in questions 32a through 32h; subtract any losses. If total amount was a loss, write "Loss" above amount.  None OR  Annual amount — Dollars

Please turn the page and answer questions for Person 2 listed on page 1. If this is the last person listed in question 1a on page 1, go to the back of the form.

# APPENDIX B. Methodology of Response Error Evaluation

### COMPUTATION OF RESPONSE ERROR MEASURES AND THEIR 90-PERCENT CONFIDENCE INTERVALS

This section presents the computational forms of the response error measures used in this report along with a numerical example.

#### Display of Cross-Tabulated Dated—General Procedure

[Display of cross-tabulated data for characteristic with L categories(L $\geq$ 2). The general term  $X_{ij}$  represents the number of unweighted sample elements in the  $i^{th}$  category in the reinterview and  $j^{th}$  category in the census]

	Census classification (j= 1,,L)													
Reinterview classification (i= 1,,L)	Total matched H.U.'s	Not reported	Total	Category 1	Category 2		Category j		Category L					
Total-matched H.U.'s.  Not reported <sup>2</sup> Total  Category 1  Category 2	n' <sub>1</sub>		n <sup>3</sup> X <sub>1.</sub> X <sub>2.</sub>	X <sub>.1</sub> X <sub>11</sub> X <sub>21</sub>	X <sub>.2</sub> X <sub>12</sub> X <sub>22</sub>	  	$egin{array}{c} X_j \ X_{1j} \ X_{2j} \ \end{array}$		X <sub>.L</sub> X <sub>1L</sub> X <sub>2L</sub>					
Category i			X <sub>i.</sub>	X <sub>i1</sub>	X <sub>i2</sub>		X <sub>ij</sub> .		X <sub>iL</sub>					
Category L			X <sub>L.</sub>	X <sub>L1</sub>	X <sub>L2</sub>		X <sub>Lj</sub>		X <sub>LL</sub>					

<sup>&</sup>lt;sup>1</sup> n'..is the total number of sample cases. In the actual data tables, row 1 and column 1 contain the appropriate marginal totals.

#### Example of Procedure—Marital Status (Unedited Data; 1990)

Reinterview classification (i= 1,,5)  Total matched persons	Not reported	Reported	Now married	Widowed	Divorced	Separated	Never married
Total-matched persons       29,647         Not reported       4,704         Reported       24,943         Now married       12,367         Widowed       1,602         Divorced       1,582         Separated       334         Never married       9,058	440 97 343 61 18 21 7 236	29,207 4,607 <b>24,600</b> 12,306 1,584 1,561 327 8,822	13,811 1,588 <b>12,223</b> <b>12,011</b> 51 31 60 70	1,725 188 <b>1,537</b> 22 <b>1,466</b> 27 5	1,935 374 <b>1,561</b> 77 41 <b>1,368</b> 34	507 128 <b>379</b> 40 12 94 <b>212</b> 21	11,229 2,329 <b>8,900</b> 156 14 41 16 <b>8,673</b>

<sup>&</sup>lt;sup>2</sup> In the actual data tables, row 2 and column 2 contain the numbers of cases for which there was no report for that item in either the census or reinterview.

<sup>&</sup>lt;sup>3</sup> n..is the total number of sample cases for which there was a report in both the census and reinterview; that is, the total sample cases minus the "not reported" cases.

#### COMPUTING THE NET DIFFERENCE RATE AND INDEX OF INCONSISTENCY

Net Difference Rate for Category i

NDR = 
$$\frac{\$X_{i}\$X_{i}}{n}$$
 x\$100\$

Net Difference Rate, Marital Status Category "Separated":

NDR = 
$$\frac{379\$327}{24600}$$
 x \$100\$ =  $\frac{52}{24600}$  x \$100\$ = .21

Index of Inconsistency for Category i

$$\hat{I} = \frac{\$X_{,i}\$X_{,i}\$2X_{,i}\$}{\frac{1}{n}\$X_{,i}\$n\$X_{,i}\$\$X_{,i}\$n\$X_{,i}\$}$$

Index of Inconsistency, Marital Status Category "Separated"

$$\hat{I} = \frac{\$379\$327\$2\$212\$\$}{\frac{1}{24600}\$379\$24600\$327\$\$327\$24600\$379\$\$}$$

$$= \frac{706\$424}{\frac{1}{24600}\$379\$24273\$\$327\$24221\$\$} X\$100\$ = \frac{282}{695.92} x\$100\$ = 40.52$$

L-fold Index of Inconsistency

$$\hat{L} = \frac{\$n \$ X_{ii}\$}{\$n \$ \frac{1}{n} \$ x_{ii}x_{i}\$} x\$100\$$$

L-fold Index of Inconsistency, Marital Status:

#### **COMPUTING 90-PERCENT CONFIDENCE INTERVALS**

Net Difference Rate for Category i

$$\frac{\$X_{i}\$X_{i}}{n} \pm \frac{Z}{2n} \$Z^{2}\$4 \$X_{i}\$X_{i} \$2X_{i}\$^{1\$2} x\$100\$$$

where Z = 1.645

Exceptions:

a. If 
$$(X_i - X_{ii}) = 0$$
, then widen the upper confidence limit by adding  $\frac{Z^2}{2n} \times 100$ 

b. If 
$$(X_i-X_{ii}) = 0$$
, then widen the lower confidence limit by subtracting  $\frac{Z^2}{2n}x$100$$ 

c. If both a & b above, the confidence limits are estimated as 
$$\pm \frac{Z^2}{n}x$100$$$

### 90-PERCENT CONFIDENCE INTERVAL OF NET DIFFERENCE RATE FOR MARITAL STATUS CATEGORY "SEPARATED"

Low 90-percent confidence limit is

$$\begin{array}{c} \$379\$327\$ \$ \frac{1.645}{2} \sqrt{1.645^2\$4\$379\$327\$2\$212\$\$} \\ -1. \\ 24600 \\ \hline \frac{52\$\$.82\$\$33.63\$}{24600} x\$100\$ = .099 \end{array}$$

High 90-percent confidence limit is

$$\begin{array}{r} \$379\$327\$ + \frac{1.645}{2} \sqrt{1.645^2\$4\$379\$327\$2\$212\$\$} \\ -2. \\ \hline 24600 \\ \hline \$52\$\$.82\$\$33.63\$ \\ \hline 24600 \\ \hline x\$100\$ = .323 \\ \end{array}$$

#### 90-PERCENT CONFIDENCE INTERVAL FOR INDEX OF INCONSISTENCY FOR CATEGORY i:

1. If 
$$\frac{X_i \$ X_i \$ 2X_{ii}}{n} \$ \le .10$$
, the 90-percent confidence limits are

$$\begin{array}{c} \$X_{.i}\$X_{i.}\$2X_{ii}\$\frac{Z^{2}}{2}\$\pm\frac{Z}{2}\$Z^{2}\$4\$X_{.i}\$X_{i.}\$2X_{ii}\$\$^{1\$2} \\ \hline X_{.i}\$1\$\frac{X_{i.}}{n}\$X_{i.}\$1\$\frac{X_{.i.}}{n}\$ \end{array}$$

where Z = 1.645

2. If 
$$\frac{X_i \$ X_i \$ 2X_{ii}}{n} \$ \ge .10$$
, the 90-percent confidence limits are

where Z = 1.645

### 90-PERCENT CONFIDENCE INTERVAL FOR INDEX OF INCONSISTENCY FOR MARITAL STATUS CATEGORY "SEPARATED"

$$1. \quad \frac{379\$327\$2\$212\$}{24600} = .01$$

2. Low 90-percent confidence limit is

High 90-percent confidence limit is

\$379\$327\$2 \$212\$ \$
$$\frac{1.645^2}{2}$$
\$ \$ $\frac{1.645}{2}$ \$ \$ $\frac{1.645^2}{2}$ \$ \$ $\frac{379}{24600}$ \$ \$327\$1\$ $\frac{327}{24600}$ \$ \$327\$1\$ $\frac{379}{24600}$ \$ =  $\frac{283.35$$.82$$$33.63$}{373.96$$321.96}$ \$

#### 90-PERCENT CONFIDENCE INTERVAL FOR L-FOLD INDEX OF INCONSISTENCY:

$$n - X_{ii}$$
1. If  $\frac{X_{ii}}{n} \le .10$ , the 90\$ percent confidence limits are

where Z = 1.645

2. If 
$$\frac{n}{n} \le .10$$
 the 90-percent confidence limits are

$$\frac{\$n\$\$ X_{ii}\$ \frac{Z^{2}}{2}\$ \pm Z \$ \frac{1}{n}\$n\$\$ X_{ii}\$\$\$ X_{ii}\$\$ \$^{1\$2}}{\$n\$ \frac{1}{n}\$ X_{ii}\$} \times \$100\$$$

where Z = 1.645

#### 90-PERCENT CONFIDENCE INTERVAL FOR L-FOLD INDEX OF INCONSISTENCY, MARITAL STATUS

$$\frac{24600\$12011\$1466\$1368\$212\$8673\$}{24600} = .04$$

2. Low 90-percent confidence limit is

$$=\frac{871.35\$\$.82\$\$59.01\$}{24600\$9509.24}\$100\$=5.45$$

3. High 90-percent confidence limit is

24600\$\$\frac{1}{24600}\$\$\$12223\$\$12306\$\$\$1537\$\$1584\$\$\$1561\$\$1561\$\$\$379\$\$327\$\$\$8900\$\$8822\$\$

$$= \frac{871.35\$ \$.82\$ \$59.01\$}{24600\$9509.24} \$100\$ = 6.09$$

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≤ .10 the 90-percent confidene limits are

≤ .10 the 90-percent confidene limits are

# APPENDIX C. Data Comparison Tables for Housing Characteristics

Table C.1. Census Question H2—Which Best Describes This Building?—Unedited, Total Units: 1990 Census

	Census classification												
Reinterview classification	Total	Not re- ported <sup>1</sup>	Re- ported	1	2	3	4	5	6	7	8	9	10
TotalNot reported <sup>2</sup> Reported	12,872 2,401 10,471	127 74 53	12,745 2,327 <b>10,418</b>	853 162 <b>691</b>	8,218 1,107 <b>7,111</b>	607 149 <b>458</b>	529 133 <b>396</b>	562 176 <b>386</b>	546 155 <b>391</b>	445 144 <b>301</b>	349 110 <b>239</b>	527 167 <b>360</b>	109 24 <b>85</b>
Item responses													
1. A mobile home or trailer	702	2	700	644	52	1	2	0	0	0	0	1	0
A 1-family house detached from any other house	7,225	39	7,186	43	6,937	60	62	16	11	12	5	5	35
3. A 1-family house attched to 1 or more houses	552	5	547	1	53	341	62	24	34	12	7	5	8
4. A building with 2 apartments .	263	1	262	1	26	18	200	10	0	2	0	1	4
5. A building with 3 or 4 apartments	372	0	372	0	7	13	34	265	28	7	7	6	5
6. A building with 5 to 9 apartments	370	2	368	0	7	8	4	34	235	45	13	19	3
7. A building with 10 to 19 apartments	276	0	276	0	4	2	0	16	44	173	22	14	1
8. A building with 20 to 49 apartments	248	1	247	1	0	3	1	4	14	33	159	28	4
9. A building with 50 or more apartments	339	2	337	0	3	0	1	5	18	12	23	267	8
10. Other	124	1	123	1	22	12	30	12	7	5	3	14	17

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse.

Table C.2. Census Question H19A—Is This House on Less Than 1 Acre?—Unedited: 1990 Census

Deinterview elegation		C	Census classificatio	n	
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2
Total  Not reported <sup>2</sup>	12,872 4,280 8,592	2,846 2,069 777	10,026 2,211 <b>7,815</b>	7,656 1,775 <b>5,881</b>	2,370 436 <b>1,934</b>
Item responses					
1. Yes	6,545 2,047	604 173	5,941 1,874	<b>5,510</b> 371	431 <b>1,503</b>

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only single units.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth).

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth). This question was asked of only single units

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Table C.3. Census Question H19B—In 1989, What Were the Actual Sales of All Agricultural Products From This Property?—Unedited: 1990 Census

				Cen	sus classific	ation			_
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4	5	6
Total  Not reported <sup>2</sup> Reported	12,872 11,314 1,558	10,751 10,665 86	2,121 649 <b>1,472</b>	1,863 569 <b>1,294</b>	60 12 <b>48</b>	43 16 <b>27</b>	30 11 <b>19</b>	34 11 <b>23</b>	91 30 <b>61</b>
Item responses									
1. None	1,390 36 24 18 21 69	78 1 2 1 1 3	1,312 35 22 17 20 66	<b>1,257</b> 15 5 3 2 12	27 11 5 3 1	9 4 <b>11</b> 1 0 2	6 2 1 <b>7</b> 2 1	5 2 0 1 <b>10</b> 5	8 1 0 2 5 <b>45</b>

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only single units on 1 acre or more.

Table C.4. Census Question H4—(Tenure) Is This House or Apartment. . .?—Unedited, Total Units: 1990 Census

			Ce	nsus classifica	tion		
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4
Total  Not reported <sup>2</sup> Reported	12,872 2,448 10,424	172 62 110	12,700 2,386 <b>10,314</b>	5,357 696 <b>4,661</b>	3,081 415 <b>2,666</b>	3,995 1,217 <b>2,778</b>	267 58 <b>209</b>
Item responses							
Owned by you or someone in this household with a mortgage or loan     Owned by you or someone in this household free and clear (without a	4,510	44	4,466	4,222	111	126	7
mortgage)	2,978 2,721 215	43 21 2	2,935 2,700 213	368 51 20	<b>2,489</b> 29 37	37 <b>2,579</b> 36	41 41 <b>120</b>

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse.

Table C.5. Census Question H10—Do You Have COMPLETE Plumbing Facilities in This House or Apartment; That Is, 1) Hot and Cold Piped Water, 2) A Flush Toilet, and 3) A Bathtub or Shower?—Unedited, Total Units: 1990 Census

Daintamieus alesaification	Census classification											
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2							
Total  Not reported <sup>2</sup> .  Reported	12,872 2,362 10,510	738 263 475	12,134 2,099 <b>10,035</b>	12,022 2,074 <b>9,948</b>	112 25 <b>87</b>							
Item responses												
1. Yes	10,430 80	471 4	9,959 76	<b>9,910</b> 38	49 <b>38</b>							

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth). This question was asked of only single units on 1 acre or more.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth).

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth).

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Table C.6. Census Question H13—How Many Automobiles, Vans, and Trucks of 1-Ton Capacity or Less Are Kept at Home for Use by Members of Your Household?—Unedited, Total Units: 1990 Census

		2,407     396     2,011     365     767     617     179     54     18     6       0,465     584     9,881     890     3,167     3,861     1,426     391     98     32											
Reinterview classification	Total			1	2	3	4	5	6	7	8		
Total Not reported <sup>2</sup>	12,872	1				· '			_		21		
Reported	10,465	1	, ,		_	-	_	_	_	-	16		
Item responses													
1. None	929	93	836	730	94	10	1	1	0	0	0		
2. 1	3,329	198	3,131	119	2,665	296	40	10	0	1	0		
3. 2	4,091	195	3,896	31	368	3,122	324	38	11	1	1		
4. 3	1,490	69	1,421	8	32	347	890	123	14	6	1		
5. 4	464	21	443	2	8	71	136	173	41	9	3		
6. 5	122	6	116	0	0	12	25	38	29	8	4		
7. 6	28	0	28	0	0	2	9	5	3	6	3		
8. 7 or more	12	2	10	0	0	1	1	3	0	1	4		

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse.

Table C.7. Census Question H17— About When Was This Building First Built?—Unedited, Total Units: 1990 Census

					C	ensus clas	sification					
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4	5	6	7	8	9
Total  Not reported <sup>2</sup> Reported	12,872 2,518 10,354	856 327 529	12,016 2,191 <b>9,825</b>	130 22 <b>108</b>	880 159 <b>721</b>	898 160 <b>738</b>	2,206 331 <b>1,875</b>	1,628 262 <b>1,366</b>	1,436 211 <b>1,225</b>	800 120 <b>680</b>	1,712 276 <b>1,436</b>	2,326 650 <b>1,676</b>
Item responses												
1. 1989 or 1990 2. 1985 to 1988	152 793	7 32	145 761	<b>69</b> 28	37 <b>582</b>	10 89	8 21	3	0	1 2	2	15 32
3. 1980 to 1984	819 2,178	41 109	778 2,069	2	76 9	<b>503</b> 109	119 <b>1,518</b>	14 189	0 24	1 6	2 5	61 207
5. 1960 to 1969	1,532 1,356	78 53	1,454 1,303	3 0	5 2	3 2	106 25	<b>946</b> 116	177 <b>832</b>	19 113	21 36	174 177
7. 1940 to 1949	791 2,010	46 110	745 1,900	1 2	1 0	1 3	3 14	20 19	86 48	<b>382</b> 120	112 <b>1,183</b>	139 511
9. Don't know	723	53	670	1	9	18	61	58	55	36	72	360

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth).

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth).

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Table C.8. Census Question H7A—What Is the Monthly Rent?—Unedited: 1990 Census

Table 0.0. Octions	acstic		wiiat	13 1110		iy ittii		cuitcu	. 1330 \	ocnous	•			
						C	Census cl	assificati	on					
Reinterview classification	Total	Not re- ported <sup>1</sup>	Re- ported	1	2	3	4	5	6	7	8	9	10	11
Total  Not reported <sup>2</sup> Reported	12,872 10,256 2,616	8,944 8,777 167	3,928 1,479 <b>2,449</b>	173 81 <b>92</b>	63 16 <b>47</b>	118 38 <b>80</b>	99 32 <b>67</b>	166 57 <b>109</b>	130 47 <b>83</b>	222 87 <b>135</b>	159 68 <b>91</b>	220 85 <b>135</b>	201 78 <b>123</b>	236 94 <b>142</b>
Item Responses														
1. Less than \$80	102 40 90 70 116	12 1 11 9 10	90 39 79 61 106	65 7 3 1 0	7 <b>24</b> 9 0	3 3 <b>56</b> 9 3	0 1 3 <b>40</b> 11	1 0 2 8 <b>75</b>	1 0 0 1 6	3 2 2 0 2	1 0 2 0 0	2 0 1 0 2	0 0 0 1 1	2 0 0 0 1
6. \$175 to \$199	83 157 83 143 122	7 12 5 7 6	76 145 78 136 116	1 3 1 4 0	1 3 0 2 0	1 1 1 1 0	1 2 0 1 1	7 5 0 2 3	55 11 1 1	1 <b>106</b> 9 4 2	0 4 <b>58</b> 13 1	1 5 4 <b>97</b> 9	2 1 0 5 <b>82</b>	1 3 1 0 9
11. \$300 to \$324	167 96 145 125 145	15 5 8 6 9	152 91 137 119 136	1 1 1 1	0 0 0 0	0 1 0 0	2 0 0 1 0	2 0 3 0 0	2 1 2 0 0	1 0 1 0 1	3 4 0 1 2	7 2 2 1 0	20 4 1 4	<b>96</b> 12 9 3 2
16. \$425 to \$449	84 113 85 90 42	3 5 4 6 1	81 108 81 84 41	1 0 0 0	0 0 0 0	0 0 0 0	1 1 1 0 0	0 0 0 0	1 0 0 0	0 0 0 0	0 1 0 1 0	0 0 0 0	0 0 0 0	1 1 0 0 1
21. \$550 to \$599	119 93 70 62 121 53	7 3 3 3 5 4	112 90 67 59 116 49	0 0 0 0 1	0 0 0 0 0	0 0 0 0 0	0 0 0 0 1	0 0 1 0 0	0 0 0 0 0	0 0 0 0 1	0 0 0 0 0	0 0 0 0 1 1	1 0 0 0 0	0 0 0 0 0

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only renters.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth). This question was asked of only renters.

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Table C.8. Census Question H7A—What Is the Monthly Rent?—Unedited: 1990 Census—Con.

	Census classification—Con.														
Reinterview classification	4.0	40		4.5		_							0.4	0.5	
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Total	162 65 <b>97</b>	214 74 <b>140</b>	186 63 <b>123</b>	213 86 <b>127</b>	144 55 <b>89</b>	146 48 <b>98</b>	132 40 <b>92</b>	124 51 <b>73</b>	76 27 <b>49</b>	174 62 <b>112</b>	105 41 <b>64</b>	108 38 <b>70</b>	91 34 <b>57</b>	185 75 <b>110</b>	81 37 <b>44</b>
Item responses															
1. Less than \$80	0 0 1 1 1	1 0 0 0 2	0 0 0 0	0 0 0 0	1 0 0 0 1	1 1 0 0 1	0 0 0 0	1 0 0 0	0 0 0 0	1 1 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
6. \$175 to \$199	0 0 0 0	0 0 0 2 4	1 0 1 1	0 0 0 0	0 0 0 0 1	2 1 0 1 0	1 0 2 0 1	0 0 0 0	0 0 0 1 0	1 0 0 0	0 0 0 1 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
11. \$300 to \$324	8 <b>59</b> 18 4 2	3 3 <b>92</b> 17 8	3 0 2 <b>78</b> 26	2 1 4 5 <b>79</b>	1 1 0 1 5	0 0 0 1 5	0 2 1 0 0	0 0 1 1 0	0 0 0 0	0 0 0 0	0 0 0 1 0	0 0 0 0	0 0 0 0	1 0 0 0 1	0 0 0 0
16. \$425 to \$449 17. \$450 to \$475 18. \$475 to \$499 19. \$500 to \$524 20. \$525 to \$549	0 0 0 0	2 3 2 0 0	3 2 0 3 0	19 8 3 1 0	<b>45</b> 24 6 1 0	5 <b>58</b> 9 8 3	2 6 <b>56</b> 13 2	1 2 2 <b>49</b> 7	0 0 0 3 <b>24</b>	0 1 2 4 1	0 1 0 1 2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
21. \$550 to \$599	0 0 1 2 0	0 1 0 0 0	1 0 1 0 0	1 1 2 1 0 0	1 1 0 0 0 0	2 0 0 0 0	2 3 1 0 0	5 3 0 0 0	13 3 3 1 1 0	<b>76</b> 18 4 1 1	4 48 6 0 0	2 9 <b>43</b> 9 6 1	2 1 4 <b>40</b> 9 0	2 1 1 4 <b>94</b> 6	0 1 0 1 1 <b>41</b>

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only renters.
<sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth). This question was asked of only renters.

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Table C.9. Census Question H7B—Does the Monthly Rent Include Any Meals?—Unedited: 1990 Census

Deinten in eleccification	Census classification										
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2						
Total	12,872 10,138 2,734	9,069 8,798 271	3,803 1,340 <b>2,463</b>	17 8 <b>9</b>	3,786 1,332 <b>2,454</b>						
Item responses											
1. Yes	7 2,727	2 269	5 2,458	<b>2</b> 7	3 <b>2,451</b>						

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only renters.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth). This question was asked of only renters.

### APPENDIX D. **Data Comparison Tables for Population Characteristics**

Table D.1. Census Question P7—Is This Person of Spanish/Hispanic Origin?—Unedited, Total Persons: 1990

	Census classification											
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4	5				
Total	29,647 4,760 24,887	1,137 229 908	28,510 4,531 <b>23,979</b>	26,413 4,052 <b>22,361</b>	1,262 280 <b>982</b>	251 68 <b>183</b>	92 18 <b>74</b>	492 113 <b>379</b>				
Item responses:												
No (not Spanish/ Hispanic)     Yes, Mexican, Mexican-American, Chicano     Yes, Puerto Rican     Yes, Cuban     Syes, other Spanish/ Hispanic	23,149 1,039 187 76 436	853 24 5 2 24	22,296 1,015 182 74 412	<b>22,186</b> 59 11 5 100	31 <b>917</b> 0 1 33	4 1 <b>167</b> 0 11	5 0 0 <b>64</b> 5	70 38 4 4 263				

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse.

Table D.2. Census Question P10—When Did This Person Come to the United States to Stay?—Unedited: 1990 Census

	Census classification													
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4	5	6	7	8	9	10	
Total	29,647 28,102 1,545	26,850 26,654 196	2,797 1,448 <b>1,349</b>	321 159 <b>162</b>	192 86 <b>106</b>	224 97 <b>127</b>	187 84 <b>103</b>	371 172 <b>199</b>	266 121 <b>145</b>	209 98 <b>111</b>	212 122 <b>90</b>	358 188 <b>170</b>	457 321 <b>136</b>	
Item responses:														
1. 1987 to 1990	185 130 136 147 222	26 23 16 22 36	159 107 120 125 186	134 17 2 2 6	11 <b>75</b> 16 2 0	1 8 <b>90</b> 24 2	3 4 5 <b>74</b> 13	4 2 5 17 <b>152</b>	2 0 1 4 11	0 0 1 1 2	2 0 0 1	0 1 0 0	2 0 0 0 0	
6. 1970 to 1974	164 133 99 189 140	20 19 12 10 12	144 114 87 179 128	0 0 0 0	0 0 0 0 2	1 0 1 0 0	1 2 0 1 0	12 3 2 1	118 8 1 0	10 <b>88</b> 3 6 0	1 8 7 <b>3</b> 4 1	1 5 7 <b>150</b> 6	0 0 0 17 <b>117</b>	

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only those persons born outside the U.S.
<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only those persons born outside the U.S.

Table D.3. Census Question P11—At Any Time Since February 1, 1990, Has This Person Attended Regular School or College?—Unedited, Total Persons: 1990 Census

Reinterview classification			Census cl	assification		
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3
Total  Not reported <sup>2</sup> Reported.	29,647 4,699 24,948	2,377 721 1,656	27,270 3,978 <b>23,292</b>	20,650 2,887 <b>17,763</b>	5,642 924 <b>4,718</b>	978 167 <b>811</b>
Item responses:						
No, has not attended since February 1     Yes, public school, public college     Yes, private school, private college	18,841 5,184 923	1,250 348 58	17,591 4,836 865	<b>17,033</b> 583 147	446 <b>4,140</b> 132	112 113 <b>586</b>

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse.

Table D.4. Census Question P28C—Is This Industry Mainly. . .?—Unedited: 1990 Census

Reinterview classification	Census classification												
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4						
Total	29,647 16,423 13,224	13,474 11,730 1,744	16,173 4,693 <b>11,480</b>	776	627 169 <b>458</b>	2,805 940 <b>1,865</b>	9,973 2,808 <b>7,165</b>						
Item responses:													
1. Manufacturing 2. Wholesale Trade 3. Retail Trade 4. Other	2,238 619 2,213 8,154	233 77 271 1,163	2,005 542 1,942 6,991	<b>1,614</b> 91 86 201	65 <b>223</b> 77 93	71 79 <b>1,282</b> 433	255 149 497 <b>6,264</b>						

Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older who reported working in 1985 or later.

Table D.5. Census Question P30—Was This Person. . .?—Unedited: 1990 Census

					Census	classificati	on				
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4	5	6	7	8
Total	29,647 16,470 13,177	12,954 11,516 1,438	16,693 4,954 <b>11,739</b>	11,339 3,448 <b>7,891</b>	996 266 <b>730</b>	1,099 297 <b>802</b>	778 202 <b>576</b>	641 189 <b>452</b>	1,207 332 <b>875</b>	454 108 <b>346</b>	179 112 <b>67</b>
Item responses:											
Employee of a PRIVATE FOR PROFIT company or business or of an individual, for wages, salary or commissions	8,751	966	7,785	7,249	164	59	38	28	142	86	19
Employee of a PRIVATE NOT-FOR-PROFIT, tax- exempt, or charitable organization	784	59	725	182	473	35	16	6	8	3	2
3. Local GOVERNMENT employee	920	108	812	75	47	598	75	7	6	2	2
4. State GOVERNMENT employee	678	63	615	45	34	88	433	12	2	0	1
5. Federal GOVERNMENT employee	493	36	457	30	2	16	7	397	4	1	0
SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm	1,111	156	955	190	9	5	5	2	658	61	25
7. SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm	375	32	343	102	1	1	2	0	41	191	5
8. Working WITHOUT PAY in family business or farm	65	18	47	18	0	0	0	0	14	2	13

<sup>1</sup>Not reported includes individual item nonresponse. This questions was asked of only persons 15 years or older who reported working in 1985 or later.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older who reported working since January 1, 1989 or later.

Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older who reported working since January 1, 1989 or later.

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Table D.6. Census Question P4—What Is This Person's Race?—Unedited, Total Persons: 1990 Census

Reinterview								Censu	s classi	fication									
classification	Total	Not re- ported <sup>1</sup>	Re- ported	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total	29,647 4,683 24,964	578 153 425	29,069 4,530 <b>24,539</b>	24,286 3,367 <b>20,919</b>	3,098 723 <b>2,375</b>	157 40 <b>117</b>	3 2 1	1 1 <b>0</b>	137 47 <b>90</b>	156 42 <b>114</b>	31 8 <b>23</b>	83 19 <b>64</b>	43 17 <b>26</b>	83 16 <b>67</b>	67 11 <b>56</b>	6 1 <b>5</b>	9 0 <b>9</b>	105 24 <b>81</b>	804 212 <b>592</b>
Item responses:																			
1. White	21,325 2,453 120 1 0	291 47 5 0 0	21,034 2,406 115 1 0	20,564 59 36 1 0	30 <b>2,306</b> 5 0 0	42 2 <b>69</b> 0 0	1 0 0 <b>0</b> 0	0 0 0 0 <b>0</b>	1 0 0 0 0	3 1 0 0 0	2 0 0 0 0	0 0 0 0 0	0 0 0 0 0	2 0 0 0 0	4 1 0 0 0	0 0 0 0	0 0 0 0 0	36 3 0 0 0	349 34 5 0 0
7. Filipino	101	0	101	4	0	0	0	0	0	95	0	0	0	0	0	0	0	1	. 1
8. Hawaiian	28	2	26	4	0	0	0	0	0	1	15	0	0	1	0	4	0	0	1
9. Korean	63 25	0	63 25	3 0	0 0	0	0	0	0 4	0 0	0 0	<b>60</b> 0	0 <b>21</b>	0 0	0 0	0 0	0	0 0	0 0
11. Japanese	69 52 2 11 90	0 0 0 1 10	69 52 2 10 80	7 3 1 1 6	0 0 0 0 7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 2	0 0 0 0 7	1 0 0 0 4	0 1 0 0	0 0 0 0	<b>59</b> 1 0 0 3	0 <b>45</b> 0 0 5	0 0 <b>1</b> 0	0 0 0 <b>9</b>	0 2 0 0 <b>14</b>	2 0 0 0 32
16. Other race	522	68	454	229	27	4	0	0	0	4	0	3	1	0	1	0	0	22	163

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse.
<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

Table D.7. Census Question P8—In What U.S. State or Foreign Country Was This Person Born?—Edited, Total Persons: 1990 Census

	Census classification														
Deleterile		1					Cens	us ciassiii	Ication			T			
Reinterview classification	Total	Not re- ported <sup>1</sup>	Re- ported	AL	AK	AZ	AR	CA	со	СТ	DE	DC	FL	GA	н
Total	27,983 10,937 17,046	0 0 0	27,983 10,937 <b>17,046</b>	630 241 <b>389</b>	25 14 <b>11</b>	169 76 <b>93</b>	380 143 <b>237</b>	1,571 700 <b>871</b>	268 125 <b>143</b>	314 123 <b>191</b>	41 16 <b>25</b>	108 40 <b>68</b>	514 211 <b>303</b>	630 263 <b>367</b>	109 56 <b>53</b>
Item responses:															
Alabama	396	0	396	377	1	0	0	0	0	0	0	0	3	1	0
Alaska	26	0	26	0	8	1	8	0	0	0	0	0	0	0	0
Arizona	99 220	0	99 220	0	0	<b>85</b> 0	2 <b>215</b>	2	0	0	0	0		0	0
California	865	0	865	0	0	1	0	830	0	0	0	ō	3	0	0
Colorado	149	0	149	0	0	0	0	3	138	2	0	0	0	0	0
Connecticut	192	0	192	0	0	0	0	0	0	179	0	0	0	0	0
Delaware	25 66	0	25 66	0	0	0	0	0	0	0	<b>22</b> 0	0 <b>58</b>	0	0	0
Florida	289	0	289	1	0	0	0	2	0	1	0	0	272	2	ő
Georgia	372	0	372	1	0	0	0	0	0	0	1	0	5	354	0
Hawaii	56	0	56	0	0	0	0	0	0	0	0	0	0	0	53
Idaho	46 983	0	46 983	0 1	0	0	0	0	0	0	0	0	0 2	0	0
Illinois	983 476	0	983 476	0	0	0	0	0	1	0	1	0	2 2	0	0
lowa	305	0	305	0	0	0	0	1	0	0	0	0	0	0	0
Kansas	233	0	233	0	0	1	0	0	0	0	0	0	0	0	0
Kentucky	380	0	380	0	0	0	0	0	1	0	0	0	0	0	0
Louisiana	366 89	0	366 89	0	1	0	0	1	0	0	0	0	0	1	0
Maryland	210	0	210	0	0	0	0	0	1	1	0	3	0	0	0
Massachusetts	422	0	422	0	0	0	0	0	0	1	0	0	0	2	0
Michigan	704	0	704	1	0	0	2	0	0	0	0	0	2	1	0
Minnesota	388	0	388	0 2	0	0	1	0	0	0	0	0	0	0	0
Mississippi	283		283		0	0	2		0	0					0
Missouri	441 35	0	441 35	0	0	0	0	2	0	0	0	0	0	1	0
Nebraska	140	0	140	0	0	0	0	1	0	0	0	0	0	0	0
Nevada	17	0	17	0	0	0	0	0	0	0	0	0	0	0	0
New Hampshire	45	0	45	0	0	0	0	0	0	0	0	0	0	0	0
New Jersey	384 52	0	384 52	0	0	0	0	1	0	0	0	0	0	0	0
New York	1,278	0	1,278	1	0	0	1	3	0	2	1	o o	4	1	0
North Carolina	471	0	471	0	0	0	0	1	0	0	0	0	1	1	0
North Dakota	64	0	64	0	0	0	0	0	0	0	0	0	0	0	0
Ohio	887 252	0	887 252	0	0	2	0	4	0	2	0	0	0	0 1	0
Oklahoma	93	0	93	0	0	0	o l	0	0	0	0	0		0	
Pennsylvania	995	0	995	1	0	0	0	0	0	2	0	0	2	0	0
Rhode Island	77	0	77	0	0	0	0	0	0	0	0	0	0	0	0
South Carolina	282	0	282	1	0	0	0	0	0	0	0	0	1	1	0
South Dakota	56 400	0	56 400	0 2	0	1	0 2	0	0	0	0	0	0	0	0
Texas	837	0	837	0	0	1	2	1	0	1	0	Ö	1	0	0
Utah	79	0	79	0	0	0	0	1	1	0	0	0	0	0	0
Vermont	19	0	19	0	0	0	0	0	0	0	0	0	0	0	0
Virginia	372 207	0	372 207	1 0	0 1	0	0	1 1	0	0	0	1 1	2 0	1	0
West Virginia	224	0	224	0	0	0	0	1	0	0	0	0		0	0
Wisconsin	494	0	494	0	0	0	0	0	0	0	0	0	0	0	0
Wyoming	29	0	29	0	0	0	0	0	0	0	0	0	0	0	0
Puerto Rico	62	0	62	0	0	0	0	0	0	0	0	0	0	0	0
Guam	8 1	0	8 1	0	0	0	0	0	0	0	0	0	0	0	0
U.S. Virgin Islands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other U.S. trusts and pos-	U		"	ا	J	U		U		J					"
sessions	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Canada	48 197	0	48 197	0	0	0	0	1 5	0	0	0	0	0	0	0
All other responses	859	0	859	0	0	0	0	2	0	0	0	4	2	0	0

<sup>&</sup>lt;sup>1</sup>Edited census data; not reported responses were allocated.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

Table D.7. Census Question P8—In What U.S. State or Foreign Country Was This Person Born?—Edited, Total Persons: 1990 Census—Con.

Reinterview	Census classification—Con.															
classification	ID	IL	IN	IA	KS	KY	LA	ME	MD	MA	МІ	MN	MS	МО	МТ	NE
Total Not reported <sup>2</sup> Reported	75 31 <b>44</b>	1,507 529 <b>978</b>	730 270 <b>460</b>	528 208 <b>320</b>	384 140 <b>244</b>	607 211 <b>396</b>	589 226 <b>363</b>	146 60 <b>86</b>	348 138 <b>210</b>	661 236 <b>425</b>	1,128 448 <b>680</b>	649 253 <b>396</b>	429 140 <b>289</b>	754 326 <b>428</b>	63 22 <b>41</b>	198 62 <b>136</b>
Item responses:																
AlabamaAlaskaArizonaArkansasCalifornia	0 0 0 0	1 0 0 0 1	0 0 0 0	0 0 0 0 2	0 0 0 0 2	0 0 1 0	0 1 0 0	0 1 0 0	0 0 0 0	0 0 0 0	0 1 1 0 0	0 0 0 0	2 0 0 0	0 0 0 1 0	0 0 0 0	0 0 0 0
Colorado	0 1 0 0	1 0 0 0	0 0 1 0	0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 1 1	0 3 0	0 0 0	0 0 0	0 0 0	1 0 0	0 0 0	0 0 0
Florida	0	0	0	0	0	0	0	0	0	1	2	1	0	ō	0	0
Georgia	0 0 <b>43</b> 0 0	0 0 0 <b>956</b> 3	1 0 0 5 <b>443</b>	0 0 0 0 20	0 0 0 1 0	0 0 0 1 1	1 0 0 0	0 0 0 0	0 1 0 0	0 0 0 0	1 0 0 0	0 0 0 0	0 0 0 1 0	0 0 0 1 1	0 0 0 0	0 0 0 0
lowa	0 0 0 0	2 0 0 2 0	1 1 1 0 0	294 0 0 0	0 <b>222</b> 0 0	0 0 <b>372</b> 0 0	0 0 0 <b>353</b> 0	0 0 0 0 <b>83</b>	0 0 0 1 1	0 0 1 0 2	0 0 0 0	0 0 0 0	1 0 0 2 0	1 5 0 0	1 1 0 0	1 0 0 0
Maryland	0 0 0	1 0 0	0 0 1 0	0 0 0 0	0 0 1 0	0 0 1	0 0 1 0	0 1 0	198 0 0	0 <b>405</b> 0 1	0 0 <b>661</b> 0	1 0 10 <b>376</b>	0 1 5 0	1 0 4 0	0 0 0	0 0 0 0
Mississippi	0	2	0	0	0	0	1	0	0	0	2	0	268	3	0	0
Missouri	0 0 0	2 0 0	0 0 0	0 0 3	14 0 0	0 0 0	1 0 0	0 0 0	0 0 0	0 0 0	1 0 0	0 0 0	4 0 0	<b>407</b> 0 0	4 33 0	0 0 <b>135</b>
Nevada	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Jersey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New York	0 0 0	0 1 0	0 0 0	0 0 0	0 0 0	0 0 0	0 1 0	0 0 0	1 1 0	4 0 0	0 0 0	1 0 2	1 1 0	0 0 0	0 0 0	0 0 0
Ohio	0 0 0	0 0 0	5 0 0	0 0 0	0 1 0	8 0 0	1 1 1 0	0 0 0	1 0 0 1	0 0 0	3 0 1 0	1 0 0	1 0 0	1 0 0	0 0 0	0 0 0
Rhode Island	0	0	0	Ö	0	0	0	1	0	1	0	0	0	0	0	0
South Carolina	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 8	0 0 0	0 0 0	1 0 0	0 0 0	1 0 1	0 1 0	0 0 1	1 0 0	0 0 0	0 0 0
Texas	0	1	0	1 0	2	2	0 0	0	1	0	1 0	2	0	1 0	0	0
Vermont Virginia	0	0	0	0	0	0	0 0	0	0	1 0	0 1	0	0	0	0	0
Washington	0 0 0	0 0 1	0 0 0	0 0 0	0 0 0	0 1 0	0 1 0	0 0 0	0 0 0	0 0 0	1 0 0	0 0 1	0 0 0	0 0 0	0 0 0	0 0 0
Wyoming	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 4 0 0	0 0 0	0 0 0	0 0 0	0 0 0	1 0 0	0 0 0
U.S. Virgin Islands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other U.S. trusts and possessions	0 0 0	0 0 3	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
All other responses	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

<sup>&</sup>lt;sup>1</sup>Edited census data; not reported responses were allocated.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

Table D.7. Census Question P8—In What U.S. State or Foreign Country Was This Person Born?—Edited, Total Persons: 1990 Census—Con.

Reinterview							Cen	sus class	ification—	-Con.						
classification	NV	NH	NJ	NM	NY	NC	ND	ОН	ОК	OR	PA	RI	SC	SD	TN	TX
Total  Not reported <sup>2</sup> Reported	45 25 <b>20</b>	79 29 <b>50</b>	618 232 <b>386</b>	91 41 <b>50</b>	2,053 781 <b>1,272</b>	749 277 <b>472</b>	97 31 <b>66</b>	1,392 499 <b>893</b>	401 147 <b>254</b>	181 88 <b>93</b>	1,646 638 <b>1,008</b>	126 45 <b>81</b>	423 136 <b>287</b>	92 39 <b>53</b>	605 211 <b>394</b>	1,469 634 <b>835</b>
Item responses:																
AlabamaAlaskaArizonaArkansasCalifornia	0 0 0 0	0 0 0 0	1 0 0 0	0 0 0 0	3 0 1 1 3	1 0 0 0	0 0 0 0	5 0 2 0 1	0 0 0 1 0	0 0 0 0	0 0 0 0	0 0 0 0	1 0 1 0	0 0 0 0	0 0 0 1	0 4 4 1 5
Colorado	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
Connecticut	0 0 0 0	0 0 0	0 1 1 0	0 0 0 0	6 0 0 0	0 0 1 0	0 0 0 0	0 0 0 1	0 0 0 0	0 0 0 0	0 0 1 0	0 0 0 0	1 0 0 2	1 0 0 0	0 0 0 0	0 0 0 0
Georgia	0 0 0	0 0 0	1 0 0 1	0 0 0	0 0 0 1	1 0 0 0	0 0 0	0 0 0 3	0 0 0	0 0 0	1 0 0 1	0 0 0	1 0 0	0 0 0	4 0 0 1	0 0 0
Indiana	0 0	0	0 0 0	0 0 0	0 1 0	0 0 0	0 0 0	3 0 0	0 0 2	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 1
Kentucky	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	1 0 0	0 0 0	2 0 1	0 1 0	0 0 1	0 0 0	0 0 1	0 1 0	0 0 0	0 0 0	0 2 0
Maryland	0 0 0	0 4 0 0	1 0 1 0	0 0 1 1	0 1 0 1	0 0 2 0	1 0 0 0	0 0 2 0	0 0 0	0 1 1 0	1 0 1 0	0 2 0 0	0 0 0	0 0 0 1	0 0 0	1 0 1 0
Mississippi	0	0	0	0 0	0 0	0	0	0	1 0	0	0 0	0	0	0	2	0
Montana Nebraska Nevada	0 1 <b>17</b>	0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
New Hampshire	0	<b>44</b> 0	0 <b>362</b>	0	0 9	0	0	0	0	0	1 4	0	0	0	0	0
New Mexico	0 0 0 0	0 2 0 0	0 11 1 0	44 0 0	0 <b>1,223</b> 2 0	0 4 <b>450</b> 0	1 0 0 <b>62</b>	0 0 0 0	0 0 0 0	0 0 0 0	0 5 1 0	0 1 0 0	0 0 5 0	0 0 0 0	0 1 0 0	0 0 0 0
Ohio	0 0 1 0	0 0 0	0 0 0 3	0 0 0 0	1 0 0 1	0 0 0 0	0 0 0 0	<b>851</b> 0 0 2	2 <b>241</b> 0 0	0 0 <b>88</b> 0	2 1 0 <b>979</b>	0 0 0 1	0 0 0 0	0 0 0	2 1 0 0	0 1 0 0
Rhode Island	0 0	0 0	0 0 0	0 0 1	0 0 0	0 3 0	0 0 1	0 0	0 0 0	0 0 0	0 1 1	<b>74</b> 0 0	0 <b>270</b> 0	0 0 <b>51</b>	0 0 0	0 1 0
Tennessee	0	0	0	0 1	0 0	0	0 1	1 2	1 2 0	0 0 1	3 0 0	0 0	1 0	0 0	<b>376</b>	2 <b>805</b>
Vermont	0 0 0	0 0 0	0 0 0	0 0 0	0 2 1	0 0 6	0 0 0	1 0 1	0	0	0 1	0 0 0	0 0 1	0 0 0	0 0 0	1 0 0
Washington	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 1 0	0 0 0	0 4 0	0 0 0	0 0 0	1 0 0	0 0 0	1 0 0	0 0 0	0 0 0	0 0 1
Wyoming	0 0 0	0 0 0	0 0 0	0 0 0	0 1 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 1 0	0 0 0	0 1 0	0 0 0	0 0 0	0 0 0
American Samoa U.S. Virgin Islands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other U.S. trusts and possessions	0 0 0	0 0 0	0 0 0 1	0 0 1 1	0 0 0 14	0 0 0	0 0 0	0 0 0 10	0 0 0 1	0 0 0	0 0 0 1	0 0 0 1	0 0 0	0 0 0	0 0 0	0 0 2 2

<sup>&</sup>lt;sup>1</sup>Edited census data; not reported responses were allocated.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

Table D.7. Census Question P8—In What U.S. State or Foreign Country Was This Person Born?—Edited, Total Persons: 1990 Census—Con.

	Census classification—Con.														
Reinterview classification	UT	VT	VA	WA	WV	WI	WY	Puerto Rico	Guam	Amer- ican Samoa	Virgin Islands	Other U.S.	Canada	Mexico	Other
Total	152 74 <b>78</b>	33 16 <b>17</b>	612 240 <b>372</b>	366 156 <b>210</b>	336 110 <b>226</b>	810 311 <b>499</b>	55 27 <b>28</b>	98 40 <b>58</b>	11 3 <b>8</b>	2 0 <b>2</b>	2 2 <b>0</b>	4 1 3	73 29 <b>44</b>	377 182 <b>195</b>	1,430 585 <b>845</b>
Item responses: Alabama Alaska. Arizona Arkansas. California Colorado Connecticut Delaware District of Columbia Florida Georgia. Hawaii. Idaho Illinois. Indiana Iowa Kansas Kentucky. Louisiana Maryland Massachusetts Michigan Minnesota. Mississippi Missouri Montana Nebraska New Hampshire New Jersey. New Mexico New York North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina South Dakota Tennessee Texas Utah Vermont Virginia Washington. West Virginia Washington. West Virginia Washington. West Virginia Washington. West Virginia Wisconsin	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	193 0 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Wyoming. Puerto Rico. Guam American Samoa U.S. Virgin Islands	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	28 0 0 0 0	0 <b>51</b> 0 0	0 0 <b>8</b> 0	0 0 0 1	0 0 0 0	0 2 0 0	0 0 0 0	0 1 0 0	0 1 0 0
Other U.S. trusts and possessions	0 0 0	0 0 0	0 0 0	0 1 0 0	0 0 0 1	0 0 0	0 0 0	0 0 0 1	0 0 0	0 0 0 0	0 0 0	1 0 0	0 <b>43</b> 0 0	0 0 <b>183</b> 1	0 3 3 <b>815</b>

<sup>&</sup>lt;sup>1</sup>Edited census data; not reported responses were allocated.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

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Table D.8. Census Question P12—How Much School Has This Person Completed?—Unedited, Total Persons: 1990 Census

				Ce	nsus classifica	ition			
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4	5	6
Total	29,647	2,641	27,006	1,929	430	426	1,748	2,931	954
Not reported <sup>2</sup>	7,971 21,676	1,224 1,417	6,747 <b>20,259</b>	372 <b>1,557</b>	69 <b>361</b>	165 <b>261</b>	991 <b>757</b>	1,541 <b>1,390</b>	371 <b>583</b>
Item responses:									
1. No School Completed	1,800	137	1,663	1,392	200	13	16	15	4
2. Nursery School	356	21	335	74	140	109	12	0	0
3. Kindergarten	233	15	218	16	18	102	70	3	0
4. 1st, 2nd, 3rd, or 4th grade	876	74	802	13	0	34	585	103	8
5. 5th, 6th, 7th, or 8th grade	1,484	132	1,352	32	1	0	57	1,030	120
6. 9th grade	707	53	654	2	0	0	1	89	284
7. 10th grade	1,097	86	1,011	4	1	1	4	39	101
8. 11th grade	1,172	79	1,093	3	0	0	3	25	21
9. 12th grade, NO DIPLOMA	144	11	133	0	0	0	1	7	4
10. High School Graduate	6,044	386	5,658	16	1	0	6	57	33
11. Some college but no degree	3,465	244	3,221	3	0	1	2	6	4
gram	370	15	355	0	0	0	0	0	0
gram	356	12	344	0	0	0	0	1	0
14. Bachelor's degree	2,371	104	2,267	1	0	1	0	2	0
15. Master's degree	780	32	748	1	0	0	0	0	0
16. Professional school degree	222	10	212	0	0	0	0	4	0
17. Doctorate degree	199	6	193	0	0	0	0	9	4

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

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Table D.8. Census Question P12—How Much School Has This Person Completed?—Unedited, Total Persons: 1990 Census—Con.

Delinter de la cidada del cidada de la cidada del cidada del cidada del cidada de la cidada del cida					Census	classification	on—Con.				
Reinterview classification	7	8	9	10	11	12	13	14	15	16	17
Total	1,239 278 <b>961</b>	1,139 271 <b>868</b>	756 195 <b>561</b>	6,452 1,042 <b>5,410</b>	4,037 717 <b>3,320</b>	613 116 <b>497</b>	533 112 <b>421</b>	2,541 350 <b>2,191</b>	830 81 <b>749</b>	308 52 <b>256</b>	140 24 <b>116</b>
Item responses:											
1. No school completed 2. Nursery school 3. Kindergarten 4. 1st, 2nd, 3rd, or 4th grade. 5. 5th, 6th, 7th, or 8th grade	0 0 3 7 42	5 0 3 6 16	2 0 0 2 20	10 0 2 39 27	4 0 0 4 3	0 0 0 0 3	0 0 0 1 1	1 0 1 0 0	0 0 0 0	1 0 0 0 0	0 0 0 0
6. 9th grade	208 <b>490</b> 133 2 66	34 249 <b>425</b> 14 101	14 41 163 <b>15</b> 256	17 70 270 76 <b>4,389</b>	3 7 38 12 621	2 3 6 2 65	0 0 1 0 15	0 1 2 0 18	0 0 1 0 2	0 0 2 0 12	0 0 0 0
Some college but no degree	8 0 0 1 0	10 1 1 2 0	40 2 1 5 0	451 11 8 25 3	<b>2,412</b> 60 59 77 5	138 182 56 24 0	74 92 <b>200</b> 32 3	56 4 17 <b>2,032</b> 46	0 0 36 <b>681</b>	14 3 0 26 6	0 1 3 3
16. Professional school degree	0	0	0	11 1	15 0	16 0	2	10 3	20 7	<b>129</b> 63	5 <b>104</b>

<sup>1</sup>Not reported includes individual item nonresponse. <sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

Table D.9. Census Question P9—Is This Person a Citizen of the United States?—Unedited, Total Persons: 1990 Census

Deinter in a leastfination				Census clas	sification			
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4	5
Total	29,647 4,698 24,949	2,238 695 1,543	27,409 4,003 <b>23,406</b>	25,459 3,565 <b>21,894</b>	117 26 <b>91</b>	136 36 <b>100</b>	747 133 <b>614</b>	950 243 <b>707</b>
Item responses:								
Yes, born in the United States	23,336	1,374	21,962	21,848	20	21	59	14
Virgin Islands, or Northern Marianas 3. Yes, born abroad of American parent or	91	8	83	9	66	2	3	3
parents	100	9	91	4	0	62	21	4
4. Yes, U.S. citizen by naturalization	604	51	553	19	4	11	477	42
5. No, not a citizen of the United States	818	101	717	14	1	4	54	644

<sup>1</sup>Not reported includes individual item nonresponse.
<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

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Table D.10. Census Question P13—What Is This Person's Ancestry or Ethnic Origin?—Edited: 1990 Census (Single Response Only)

Daintam ia						Censi	us classifi	cation					
Reinterview classification	Total	Not re- ported <sup>1</sup>	Re- ported <sup>3</sup>	1	2	3	4	5	6	7	8	9	10
Total	27,983 18,444 9,539	11,140 9,114 2,026	16,843 9,330 <b>7,513</b>	76 51 <b>25</b>	25 5 <b>20</b>	22 15 <b>7</b>	24 20 <b>4</b>	57 20 <b>37</b>	53 28 <b>25</b>	164 85 <b>79</b>	1,287 793 <b>494</b>	29 13 <b>16</b>	244 164 <b>80</b>
Item responses:													
1. Arab	30 28 10 21 59	3 6 3 6 6	27 22 7 15 53	24 0 0 0 0	0 <b>15</b> 0 0	0 0 <b>7</b> 0 0	0 0 0 <b>0</b>	0 0 0 0 30	0 0 0 0	0 0 0 0	0 0 0 2 0	0 0 0 0	0 0 0 0
6. Danish	31 133 680 15	10 46 200 2	21 87 480 13	0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 0 0 0	20 0 0 0	0 <b>62</b> 1 0	1 3 <b>317</b> 0	0 0 0 <b>13</b>	0 0 0 0
Basque)	183	56	127	0	0	0	1	0	0	0	3	0	60
11. French Canadian	44 1,697 28 61 812	8 355 3 9 207	36 1,342 25 52 605	0 0 0 0	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 1 0 0	0 5 0 0	1 22 0 1 21	0 0 0 0 1	5 6 0 0 2
16. Italian	498 20 126 265 45	68 3 23 38 6	430 17 103 227 39	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 1	0 1 0 0	0 0 1 0	3 0 1 0	0 0 0 0	1 0 0 0
21. Romanian	13 88 89 142 38	0 23 22 40 9	13 65 67 102 29	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 4 5	0 0 0 0	0 0 0 0
26. Subsaharan African 27. Swedish	64 95 18 24	7 27 4 2	57 68 14 22	0 0 0	0 0 0 1	0 0 0	0 0 0 0	0 0 0 0	0 1 0 0	0 0 1 0	1 1 0 0	0 0 0 0	0 0 0
ican	773	259	514	0	0	0	3	1	1	1	37	0	1
31. Welsh	32 68 21	9 6 3	23 62 18	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	3 0 0	0 0 0	0 0 0
gin groups	2,156 606 526	229 100 228	1,927 506 298	0 1 0	0 3 0	0 0 0	0 0 0	0 3 1	0 1 0	3 2 3	9 17 42	0 2 0	0 1 4

<sup>1</sup>Not reported includes individual item nonresponse. If a respondent gave more than one ancestry, they were also included in the not reported category.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and the noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). If a respondent gave more than one ancestry, they were also included in the not reported category.

<sup>3</sup>Reported includes a single response for both census and reinterview.

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Table D.10. Census Question P13—What Is This Person's Ancestry or Ethnic Origin?—Edited: 1990 Census (Single Response Only)—Con.

Reinterview						Cens	sus classi	ification—	-Con.					
classification	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Total  Not reported <sup>2</sup> Reported <sup>3</sup>	203 115 <b>88</b>	2,948 1,590 <b>1,358</b>	56 31 <b>25</b>	85 35 <b>50</b>	1,486 902 <b>584</b>	810 376 <b>434</b>	35 17 <b>18</b>	197 105 <b>92</b>	448 219 <b>229</b>	72 30 <b>42</b>	17 6 <b>11</b>	115 53 <b>62</b>	396 298 <b>98</b>	191 120 <b>71</b>
Item responses:														
1. Arab	0 0 0 10 1	0 3 0 0 1	0 0 0 0	0 1 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 1	0 0 0 0	0 0 0 0	0 0 0 1 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
6. Danish	0 0 1 0	0 10 20 0	0 0 0 0	0 0 1 0	0 2 27 0	0 0 0	0 0 0 0	0 0 0 0	0 1 1 0	0 0 0 0	0 0 0 0	0 0 0	0 0 6 0	0 0 3 0
Basque)	38	3	0	0	2	3	0	0	1	0	0	0	0	0
11. French Canadian	29 0 0 0 2	0 <b>1,189</b> 0 1 20	0 0 <b>25</b> 0 0	0 1 0 <b>47</b> 0	0 13 0 0 <b>436</b>	0 2 0 0 3	0 0 0 0	0 1 0 0 0	0 3 0 0 1	0 0 0 0 1	0 0 0 0	0 2 0 0 0	0 3 0 0 25	0 1 0 0 5
16. Italian	0 0 0 0	2 0 5 1 0	0 0 0 0	0 0 0 0	2 0 0 2 0	<b>412</b> 0 0 1 0	0 <b>14</b> 1 0 0	0 0 <b>85</b> 0 0	1 0 0 <b>215</b> 1	0 0 0 0 <b>39</b>	0 0 0 0	1 1 0 2 0	0 0 0 0	0 1 0 0
21. Romanian.         22. Russian         23. Scotch-Irish         24. Scottish         25. Slovak	0 0 0 0	2 3 0 0 0	0 0 0 0	0 0 0 0	0 0 17 10 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	10 0 0 0 0	0 <b>43</b> 0 0 0	0 0 <b>33</b> 19 0	0 0 2 <b>54</b> 0
26. Subsaharan African	0 0 0 0	0 4 2 1	0 0 0 0	0 0 0	0 1 0 1	1 0 0 0	0 0 0 0	0 0 0	0 1 0	0 0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 1 0 0
American	3	36	0	0	39	7	0	1	1	0	0	4	5	4
31. Welsh	0 0 0	2 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	1 0 0	0 0 0
<ul><li>34. Race or Hispanic origin groups</li><li>35. Other groups</li><li>36. Unclassified</li></ul>	1 0 3	6 10 37	0 0 0	0 0 0	3 2 27	0 2 3	0 2 0	0 5 0	2 1 0	1 1 0	0 1 0	0 9 0	0 1 5	0 0 0

<sup>1</sup>Not reported includes individual item nonresponse. If a respondent gave more than one ancestry, they were also included in the not reported category.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and the noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). If a respondent gave more than one ancestry, they were also included in the not reported category.

<sup>3</sup>Reported includes a single response for both census and reinterview.

Table D.10. Census Question P13—What Is This Person's Ancestry or Ethnic Origin?—Edited: 1990 Census (Single Response Only)—Con.

Deleterales de estre de					Cer	nsus class	ification—	Con.				
Reinterview classification	25	26	27	28	29	30	31	32	33	34	35	36
Total  Not reported <sup>2</sup> Reported <sup>3</sup>	91 43 <b>48</b>	36 14 <b>22</b>	150 83 <b>67</b>	24 12 <b>12</b>	44 19 <b>25</b>	1,552 978 <b>574</b>	50 33 17	103 40 <b>63</b>	41 21 <b>20</b>	4,505 2,347 <b>2,158</b>	972 485 <b>487</b>	235 164 <b>71</b>
Item responses:												
1. Arab	0 0 0 0 13	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 2 2	0 0 0 0	0 0 0 0	0 0 0 0 2	1 0 0 0 2	2 3 0 0 1	0 0 0 0
6. Danish	0 0 1 0	0 0 0 0	0 0 2 0 1	0 0 0 0	0 0 0 0	0 6 56 0 7	0 0 3 0	0 0 1 0	0 0 0 0	0 1 13 0 6	0 0 17 0 1	0 2 10 0 1
11. French Canadian	0 1 0 1 0	0 0 0 0	0 2 0 0	0 1 0 0	0 0 0 0	0 50 0 2 64	0 1 0 0	0 0 0 0	0 0 0 0	0 13 0 0 16	1 15 0 0 5	0 9 0 0 4
16. Italian	0 0 0 0	0 0 0 0	0 0 0 0	1 0 0 0	0 0 0 0	7 0 1 1 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 2 3 0	0 0 7 1 0	0 0 0 0
21. Romanian	0 2 0 0 <b>25</b>	0 0 0 0	0 0 2 1 0	0 0 0 0	0 6 0 0	0 3 4 8 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 3 4 0	0 8 2 0 1	0 0 0 1 0
26. Subsaharan African	0 1 0 0	<b>11</b> 0 0 0	0 <b>51</b> 0 0	0 0 <b>10</b> 0	0 0 0 18	4 2 1 0	0 0 0 0	4 0 0 0	0 0 0 0	35 2 0 0	1 3 0 1	0 0 0 0
can	1 0 0 1	0 0 0	4 0 0 0	0 0 0 0	0 0 0 0	183 4 2 0	0 <b>11</b> 0 0	0 0 <b>54</b> 0	0 0 0 <b>15</b>	153 0 2 0	11 2 4 2	18 0 0 0
34. Race or Hispanic origin groups	0 2 0	11 0 0	0 4 0	0 0 0	0 0 0	59 15 91	1 0 1	3 1 0	0 2 0	<b>1,819</b> 24 59	6 <b>391</b> 2	3 3 <b>20</b>

¹Not reported includes individual item nonresponse. If a respondent gave more than one ancestry, they were also included in the not reported category.
²Not reported includes individual item nonresponse, person refusals, movers, and the noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). If a respondent gave more than one ancestry, they were also included in the not reported category.
³Reported includes a single response for both census and reinterview.

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Table D.11. Census Question P13—What Is This Person's Ancestry or Ethnic Origin?—Edited, Total Persons: 1990 Census (STF 3 Categories, Used First Response in CRS and Census)

Deintemiero						Cens	sus classific	cation					
Reinterview classification	Total	Not re- ported <sup>1</sup>	Re- ported	1	2	3	4	5	6	7	8	9	10
TotalNot reported <sup>2</sup> Reported	27,983 11,711 16,272	0 0 0	27,983 11,711 <b>16,272</b>	96 51 <b>45</b>	57 18 <b>39</b>	34 19 <b>15</b>	46 21 <b>25</b>	94 27 <b>67</b>	112 35 <b>77</b>	424 156 <b>268</b>	2,526 970 <b>1,556</b>	46 12 <b>34</b>	732 308 <b>424</b>
Item responses:													
1. Arab	42 44 20 42 96	0 0 0 0	42 44 20 42 96	29 0 0 0 0	0 <b>22</b> 0 0 1	0 0 <b>13</b> 0	0 0 0 <b>6</b> 0	0 0 0 0 <b>42</b>	0 0 0 0	0 0 0 0 1	1 0 0 3 1	0 0 0 0	0 0 0 5 0
6. Danish	73 312 1570 25 566	0 0 0 0	73 312 1,570 25 566	0 0 0 0	0 0 0 0	0 0 0 0	0 0 4 0 1	0 0 1 0 1	44 1 5 0	1 <b>146</b> 16 0 2	7 24 <b>861</b> 0 42	0 0 2 <b>23</b> 0	0 5 25 0 <b>238</b>
11. French Canadian	71 3,535 42 111 1,830	0 0 0 0	71 3,535 42 111 1,830	0 1 0 0 2	0 3 0 1 1	0 1 0 0	1 2 1 0	0 13 0 0 1	1 9 0 1 3	1 41 0 0 15	3 163 1 4 118	0 1 0 0	11 39 0 0 43
16. Italian	830 29 263 469 57	0 0 0 0	830 29 263 469 57	0 0 0 2 0	0 0 0 1 0	0 0 0 0	0 0 0 0	0 0 0 1 0	1 1 2 0 0	1 0 3 0 1	12 1 6 8 0	0 0 1 1 0	9 2 4 4 1
21. Romanian	18 161 148 589 60	0 0 0 0	18 161 148 589 60	0 1 0 1 0	0 1 0 0	0 0 0 0	0 0 0 1 0	0 0 0 1 2	0 0 0 0	0 1 1 7 0	0 4 11 77 2	0 0 0 0	0 0 1 2 0
26. Subsaharan African	71 227 53 35 824	0 0 0 0	71 227 53 35 824	0 1 0 0 1	0 0 0 1 1	0 0 0 0	0 0 0 0 5	0 0 0 0 1	0 2 0 1 2	0 2 1 0 6	2 10 2 0 56	0 3 0 0	0 2 1 0 7
31. Welsh	74 73 40	0 0 0	74 73 40	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	1 0 1	13 0 0	0 0 0	0 0 0
groups	2,518 815 539	0 0 0	2,518 815 539	4 3 0	0 7 0	0 0 0	1 2 0	0 3 1	0 4 0	7 7 6	36 33 55	0 2 0	10 8 7

¹Not reported includes individual item nonresponse. This item is not allocated, however, it is edited. Not reported responses were put into the "unclassified" category. ²Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

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Table D.11. Census Question P13—What Is This Person's Ancestry or Ethnic Origin?—Edited, Total Persons: 1990 Census (STF 3 Categories Used First Response in CRS and Census)—Con.

Reinterview					С	ensus class	ification—C	on.				
classification	11	12	13	14	15	16	17	18	19	20	21	22
Total	269 119 <b>150</b>	5,816 2,300 <b>3,516</b>	80 40 <b>40</b>	149 51 <b>98</b>	2,745 1,144 <b>1,601</b>	1,293 501 <b>792</b>	49 20 <b>29</b>	374 133 <b>241</b>	789 314 <b>475</b>	84 31 <b>53</b>	30 9 <b>21</b>	192 56 <b>136</b>
Item responses:												
1. Arab. 2. Austrian 3. Belgian 4. Canadian 5. Czech	0 0 1 12 2	1 5 0 3 10	0 0 0 0	0 2 0 0 0	0 0 0 1 3	3 0 0 0 1	0 0 0 0 1	0 0 0 0	0 2 0 0 1	0 0 0 1 1	0 2 0 0	1 1 0 1 0
6. Danish	0 0 7 0 62	5 47 160 2 49	0 0 1 0	0 0 2 0 2	1 21 100 0 36	0 0 12 0 10	2 0 0 0	0 1 4 0 3	0 2 7 0 7	0 0 1 0	0 0 0 0	0 0 3 0 1
11. French Canadian	38 5 0 0 6	3 <b>2,550</b> 1 8 190	0 1 <b>36</b> 0 1	0 4 1 <b>80</b> 3	2 124 0 2 <b>990</b>	0 35 0 1 18	0 1 0 0	0 28 0 0 4	0 28 1 4 12	1 0 0 0	0 1 0 0	0 7 0 0
16. Italian	1 0 1 2 0	47 1 28 20 3	0 0 0 1 0	0 0 0 0	31 0 7 12 1	659 1 0 9 2	0 <b>19</b> 1 1 0	0 0 <b>173</b> 2 0	9 0 0 <b>356</b> 0	0 0 0 0 46	0 0 0 0	2 1 0 12 0
21. Romanian         22. Russian         23. Scotch-Irish         24. Scottish         25. Slovak	0 1 0 1 0	3 13 10 66 2	0 0 0 0	0 1 0 0	0 1 32 54 0	0 1 1 2 1	0 0 0 0	0 0 1 3 0	1 6 0 2 2	0 0 0 0	13 2 0 0	0 <b>86</b> 0 0
26. Subsaharan African	0 0 0 0 6	0 24 17 2 81	0 0 0 0	0 0 0 0	0 6 3 2 62	1 0 0 0 14	0 1 0 0	0 5 0 0 3	0 2 0 4 6	0 0 0 0 1	0 0 0 0	0 1 0 0 6
31. Welsh	0 0 0	5 1 3	0 0 0	0 0 0	2 0 0	1 0 1	0 0 0	0 0 0	1 0 0	0 0 0	0 0 0	0 0 0
groups	2 0 3	44 48 64	0 0 0	0 3 0	47 14 47	9 4 6	0 3 0	1 13 0	3 14 5	1 1 0	0 3 0	0 14 0

¹Not reported includes individual item nonresponse. This item is not allocated, however, it is edited. Not reported responses were put into the "unclassified" category. ²Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

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Table D.11. Census Question P13—What Is This Person's or Ethnic Origin?—Edited, Total Persons: 1990 Census (STF 3 Categories, Used First Response in CRS and Census)—Con.

						Ce	nsus class	ification—	Con.					
Reinterview classification	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Total	595 215 <b>380</b>	408 151 <b>257</b>	134 44 <b>90</b>	37 14 <b>23</b>	345 143 <b>202</b>	81 26 <b>55</b>	63 23 <b>40</b>	1,552 725 <b>827</b>	128 49 <b>79</b>	107 37 <b>70</b>	54 21 <b>33</b>	4,882 2,234 <b>2,648</b>	1,131 463 <b>668</b>	2,429 1,231 <b>1,198</b>
Item responses:														
1. Arab	2 0 0 0	0 0 0 1 2	0 0 0 0 16	0 0 0 0	0 0 0 0	0 0 0 0 2	0 0 0 0	0 1 0 3 2	0 0 0 0	0 0 0 0	0 0 0 0 2	1 0 0 2 3	3 4 2 1 3	1 5 4 3 1
6. Danish	0 8 29 0 3	1 2 30 0 3	0 0 2 0 0	0 0 0 0	2 0 10 0 3	0 0 4 0 3	0 0 0 0	2 18 90 0 18	2 0 14 0 3	0 0 1 0	0 0 0 0	2 2 32 0 24	1 5 40 0 4	3 30 107 0 50
11. French Canadian	0 19 0 0 74	1 26 0 0 15	0 3 0 2 1	0 0 0 0	0 13 0 0 8	0 9 0 0 4	0 0 0 0 2	2 111 0 2 105	0 7 0 0 8	0 0 0 0	0 0 0 0	3 49 1 1 63	2 30 0 2 11	2 211 0 3 129
16. Italian	0 0 1 1	3 1 2 1 0	4 0 0 3 0	0 0 0 0	3 0 4 0	3 0 0 0	0 0 0 2	17 0 5 5	1 1 0 0	0 0 0 0	0 0 0 0	8 0 3 8 0	2 0 18 5 0	17 1 4 12 2
21. Romanian         22. Russian         23. Scotch-Irish         24. Scottish         25. Slovak	0 0 <b>64</b> 147 0	0 0 6 <b>150</b> 0	0 3 0 1 <b>41</b>	0 0 0 0	0 0 5 3 0	0 0 0 1	0 7 0 0 2	0 5 7 26 0	0 0 1 1 0	0 0 0 0	0 0 0 0 2	0 4 3 15 1	1 13 2 2 2	0 11 3 26 3
26. Subsaharan African	0 1 0 0	0 2 0 0	0 2 0 0	12 0 0 0	0 <b>132</b> 0 0	0 3 <b>25</b> 0	0 1 0 <b>23</b>	4 5 1 0	0 1 0 0	4 0 0 0	0 0 0 0	41 4 0 0	1 7 1 1	6 10 2 1
can	12 4 0 0	5 0 0 0	3 0 0 6	0 0 0	8 0 0 0	0 0 0 0	0 0 0 0	186 9 2 1	1 <b>34</b> 0 0	0 0 <b>57</b> 0	0 0 0 <b>24</b>	177 1 5 0	13 2 4 4	161 1 4 0
<ul><li>34. Race or Hispanic origin groups</li><li>35. Other groups</li><li>36. Unclassified</li></ul>	6 2 7	4 0 2	0 3 0	11 0 0	0 9 1	0 1 0	1 2 0	80 24 95	3 0 2	4 3 0	1 4 0	<b>2,068</b> 57 70	9 <b>470</b> 3	166 54 <b>165</b>

¹Not reported includes individual item nonresponse. This item is not allocated, however, it is edited. Not reported responses were put into the "unclassified" category. ²Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

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Table D.12. Census Question P13—What Is This Person's Ancestry or Ethnic Origin?—Edited, Total Persons: 1990 Census (34 Largest Categories, Used First Response in CRS and Census)

	•			•		•				<u>*                                    </u>		
						Census cl	assification					
Reinterview classification	Total	Not re- ported <sup>1</sup>	Reported	1	2	3	4	5	6	7	8	9
Total	27,983 11,711 16,272	0 0 0	27983 11,711 <b>16,272</b>	5,816 2,300 <b>3,516</b>	2,742 1,143 <b>1,599</b>	2,526 970 <b>1,556</b>	2,381 1,063 <b>1,318</b>	1,293 501 <b>792</b>	1,551 725 <b>826</b>	992 468 <b>524</b>	732 308 <b>424</b>	789 314 <b>475</b>
Item responses:												
1. German	3,535 1,830 1,570 1,216 830	0 0 0 0	3,535 1,830 1,570 1,216 830	<b>2,550</b> 190 160 3 47	124 <b>989</b> 100 1 31	163 118 <b>861</b> 3 12	5 1 4 <b>1,059</b> 0	35 18 12 0 <b>659</b>	111 105 89 34 17	3 3 3 1 0	39 43 25 2	28 12 7 0 9
6. American	822 539 565 469 305	0 0 0 0	822 539 565 469 305	81 4 48 20 30	61 1 36 12 38	56 2 42 8 21	114 3 2 3 17	14 3 10 9 2	186 2 18 5 40	9 <b>441</b> 4 0 6	7 1 <b>238</b> 4 4	6 0 7 <b>356</b> 1
11. Dutch	312 148 589 227 263	0 0 0 0	312 148 589 227 263	47 10 66 24 28	21 32 53 6 7	24 11 77 10 6	0 0 0 1 0	0 1 2 0 0	18 7 26 5 5	0 0 1 0	5 1 2 2 4	2 0 2 2 0
16. Russian	161 55 74 31 88	0 0 0 0	161 55 74 31 88	13 2 5 0	1 1 2 0 1	4 3 13 0 0	0 0 0 0 1	1 0 1 0 1	5 2 9 0	0 0 0 10 1	0 11 0 1 0	6 0 1 0
21. Slovak	60 29 73 111 82	0 0 0 0	60 29 73 111 82	2 3 5 8 0	0 0 1 2 0	2 7 7 4 0	1 0 0 0 0	1 0 0 1 0	0 1 2 2 0	0 0 1 0	0 0 0 0	2 1 0 4 0
26. Filipino	74 96 57 48 25	0 0 0 0	74 96 57 48 25	0 10 3 4 1	0 3 1 4 0	1 1 0 12 0	0 0 0 0	0 1 2 0 0	0 2 1 2 0	5 0 0 0 4	0 0 1 3 0	1 1 0 0
31. Greek	42 53 55 1,838	0 0 0	42 53 55 1,838	1 17 0 134	0 3 0 68	1 2 0 85	1 0 0 106	0 0 1 18	0 1 0 131	0 0 0 32	0 1 0 21	1 0 0 26

<sup>1</sup>Not reported includes individual item nonresponse. This item is not allocated, however, it is edited. Not reported responses were put into the "other" category.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

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Table D.12. Census Question P13—What Is This Person's Ancestry or Ethnic Origin?—Edited, Total Persons: 1990 Census (34 Largest Categories, Used First Response in CRS and Census)—Con.

				· ·			•						
Delate disconsistentia						Census	classification	on—Con.					
Reinterview classification	10	11	12	13	14	15	16	17	18	19	20	21	22
TotalNot reported <sup>2</sup> Reported	505 234 <b>271</b>	424 156 <b>268</b>	595 215 <b>380</b>	408 151 <b>257</b>	345 143 <b>202</b>	374 133 <b>241</b>	192 56 <b>136</b>	200 85 <b>115</b>	128 49 <b>79</b>	26 10 <b>16</b>	157 69 <b>88</b>	134 44 <b>90</b>	238 121 <b>117</b>
Item responses:													
1. German	26 38 6 6 2	41 15 16 2 1	19 74 29 0 0	26 15 30 0 3	13 8 10 0 3	28 4 4 0 0	7 0 3 0 2	4 4 7 0 1	7 8 14 0 1	1 0 0 0 0	0 1 0 1 1	3 1 2 0 4	11 19 15 0
6. American	25 1 8 0 <b>94</b>	6 0 2 0 3	12 0 3 1 4	5 2 3 1 2	8 0 3 0	3 0 3 2 1	6 0 1 12 0	4 0 48 2 1	1 0 3 0 1	0 2 0 0	1 2 0 0 0	3 0 0 3 0	20 0 8 4 6
11. Dutch	1 0 7 1 2	146 1 7 2 3	8 <b>64</b> 147 1	2 6 <b>150</b> 2 2	0 5 3 <b>132</b> 4	1 1 3 5 <b>173</b>	0 0 0 1 0	0 0 0 0 1	0 1 1 1 0	0 0 0 0	0 0 0 0	0 0 1 2 0	1 3 6 2 1
16. Russian	1 2 1 0 0	1 1 1 0 0	0 0 4 0 0	0 1 0 0	0 0 0 0	0 0 0 0	86 0 0 0	1 <b>25</b> 0 0 0	0 0 <b>34</b> 1 0	0 0 0 <b>5</b>	0 0 0 1 <b>65</b>	3 0 0 0	3 1 0 0
21. Slovak 22. White 23. Danish 24. Hungarian 25. Chinese	0 1 0 0	0 1 1 0 0	0 1 0 0	0 0 1 0	0 0 2 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 1 2 0 0	0 0 0 0	0 0 0 0	41 0 0 2 0	0 <b>9</b> 1 1 0
26. Filipino	0 1 0 0	0 1 1 0 0	0 0 0 1 0	0 2 0 0	0 1 0 0	0 0 0 0	0 0 0 0	0 2 0 0	0 0 0 0	0 0 0 0	0 0 0 0 5	0 16 0 0	0 2 0 1 0
31. Greek	0 0 0 48	0 1 0 15	0 0 0 11	0 0 0 4	0 0 0 10	0 0 0 13	0 0 0 18	0 0 0 15	0 0 0 3	0 0 0 8	0 0 0 11	0 0 0 9	0 0 0 2

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This item is not allocated, however, it is edited. Not reported responses were put into the "other" category. 
<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

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Table D.12. Census Question P13—What Is This Person's Ancestry or Ethnic Origin?—Edited, Total Persons: 1990 Census (34 Largest Categories, Used First Response in CRS and Census)—Con.

	•					-						
Daintan iau algorification					С	ensus class	ification—C	on.				
Reinterview classification	23	24	25	26	27	28	29	30	31	32	33	34
Total  Not reported <sup>2</sup> Reported	112 35 <b>77</b>	149 51 <b>98</b>	113 50 <b>63</b>	141 67 <b>74</b>	94 27 <b>67</b>	84 31 <b>53</b>	94 37 <b>57</b>	83 36 47	80 40 <b>40</b>	81 26 <b>55</b>	88 30 <b>58</b>	4,316 2,023 <b>2,293</b>
Item responses:												
1. German	9 3 5 0 1	4 3 2 0 0	0 0 0 0	0 0 2 0	13 1 1 0 0	0 0 1 0	5 1 18 2 0	0 0 2 0	1 1 1 0 0	9 4 4 0 3	0 0 0 0	250 151 137 102 23
6. American	2 0 0 0 0	0 0 2 0 0	0 0 0 0	0 0 0 1 0	1 0 1 1 0	1 0 0 0	2 0 1 0 0	1 18 1 1 0	0 0 0 1 0	0 0 3 0	0 0 0 0	187 57 70 23 34
11. Dutch 12. Scotch Irish 13. Scottish 14. Swedish 15. Norwegian	1 0 0 2 2	0 0 0 0	0 0 0 2 1	1 0 0 0	0 0 1 0 0	0 0 0 0	0 1 2 0 1	0 0 0 0	0 0 0 0	0 0 1 3 0	0 0 0 0	34 4 31 21 22
16. Russian	0 1 0 0	1 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 1 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	35 5 2 13 13
21. Slovak         22. White         23. Danish         24. Hungarian         25. Chinese	0 0 <b>44</b> 1 0	0 0 0 <b>80</b>	0 0 0 0 55	0 0 0 0	2 0 0 0 1	0 0 0 0	0 2 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 1	9 2 6 6 25
26. Filipino	0 0 0 0	0 0 0 0	0 0 0 0	61 0 0 0	0 <b>42</b> 0 0	0 1 <b>46</b> 0 0	0 0 0 <b>19</b>	0 0 0 0 4	0 0 0 0	0 2 0 0	1 0 0 0	5 8 2 2 11
31. Greek	0 0 0 6	1 0 0 5	0 0 0 5	0 0 0 9	0 0 0 3	0 0 0 4	0 0 0 2	0 0 0 14	36 0 0	0 <b>25</b> 0 1	0 0 <b>52</b> 4	1 3 2 <b>997</b>

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This item is not allocated, however, it is edited. Not reported responses were put into the "other" category. 
<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

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Table D.13. Census Question P15A—Does This Person Speak a Language Other Than English at Home?— Unedited, Total Persons: 1990 Census

Deinter in the still sti			Census classification	l.	
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2
Total	29,647 6,236 23,411	3,804 2,145 1,659	25,843 4,091 <b>21,752</b>	2,834 628 <b>2,206</b>	23,009 3,463 <b>19,546</b>
Item responses:					
1. Yes	2,472 20,939	269 1,390	2,203 19,549	<b>1,672</b> 534	531 <b>19,015</b>

Table D.14. Census Question P15C—How Well Does This Person Speak English?—Unedited: 1990 Census

Reinterview classification	Census classification								
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4		
Total	29,647 27,170 2,477	22,192 21,549 643	7,455 5,621 <b>1,834</b>	5,561 4,548 <b>1,013</b>	1,267 798 <b>469</b>	440 193 <b>247</b>	187 82 <b>105</b>		
Item responses:									
1. Very well	1,434 533 359 151	461 93 58 31	973 440 301 120	<b>759</b> 202 46 6	169 <b>199</b> 88 13	38 39 <b>130</b> 40	7 0 37 <b>61</b>		

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse.
<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth).

¹Not reported includes individual item nonresponse. This question was asked of only persons who speak a language other than English at home.

²Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons who speak a language other than English at home.

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Table D.15. Census Question P15B—What Is This Language?—Edited: 1990 Census

D					Cen	sus classific	ation				
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4	5	6	7	8
Total  Not reported <sup>2</sup> Reported.	27,983 26,323 1,660	25,070 24,671 399	2,913 1,652 <b>1,261</b>	197 134 <b>63</b>	16 15 <b>1</b>	16 10 <b>6</b>	26 16 <b>10</b>	54 32 <b>22</b>	133 81 <b>52</b>	191 118 <b>73</b>	49 30 <b>19</b>
Item responses:											
1. German 2. Yiddish 3. Scandinavian 4. Greek 5. Indic.	113 18 14 15 18	51 16 8 5 0	62 2 6 10 18	58 0 0 0	0 <b>1</b> 0 0	0 0 <b>6</b> 0	0 0 0 <b>9</b> 0	0 0 0 0 18	1 0 0 0	0 0 0 0	0 0 0 0
6. Italian. 7. French. 8. Portuguese 9. Spanish. 10. Polish.	78 155 24 788 52	27 74 6 129 19	51 81 18 659 33	1 1 0 1 0	0 0 0 0	0 0 0 0	1 0 0 0	0 0 0 0	49 2 0 0	0 <b>72</b> 0 1 0	0 0 <b>18</b> 1 0
11. Russian	12 29 34 20 46	4 10 5 2 6	8 19 29 18 40	0 0 2 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
16. Chinese	66 21 21 10 35 8 11	2 3 5 0 1 5	64 18 16 10 34 3	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
23. Other languages	72	21	51	0	0	0	0	4	0	0	0

¹Not reported includes individual item nonresponse. This was asked of only respondents who said they spoke a language other than English at home.

²Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This was asked of only respondents who said they spoke a language other than English at home.

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Table D.15. Census Question P15B—What Is This Language?—Edited: 1990 Census—Con.

Reinterview							Census	classificat	ion—Con.						
classification	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Total	1,501 834 <b>667</b>	71 39 <b>32</b>	20 12 <b>8</b>	46 26 <b>20</b>	62 32 <b>30</b>	45 29 <b>16</b>	82 43 <b>39</b>	117 51 <b>66</b>	38 17 <b>21</b>	37 20 <b>17</b>	13 1 <b>12</b>	65 31 <b>34</b>	21 18 <b>3</b>	25 14 <b>11</b>	88 49 <b>39</b>
Item responses:															
1. German 2. Yiddish 3. Scandinavian 4. Greek 5. Indic	1 0 0 0	0 0 0 0	0 0 0 0	1 0 0 0	0 0 0 1 0	0 0 0 0	0 0 0 0	0 0 0 0	1 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
6. Italian	0 3 0 <b>656</b> 0	0 0 0 0 32	0 0 0 0	0 0 0 0	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 2 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
11. Russian	0 0	0 0	<b>8</b> 0	0 <b>17</b>	0 1	0	0 0	0 0	0	0 0	0 0	0 0	0 0	0	0 0
languages	0 2 1	0 0 0	0 0 0	0 0 0	<b>27</b> 0 0	0 <b>16</b> 0	0 0 <b>35</b>	0 0 3	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 1
16. Chinese 17. Hungarian 18. Japanese 19. MonKhmer 20. Korean	0 0 0 0	0 0 0 0	0 0 0 0	1 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	63 0 0 0	0 <b>18</b> 0 0	0 0 <b>16</b> 0	0 0 0 <b>10</b> 0	0 0 0 0 34	0 0 0 0	0 0 0 0	0 0 0 0
American Indianlanguages	0 0 4	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 4	0 0 0	0 0 0	0 0 1	0 0 0	0 0 0	<b>3</b> 0 0	0 <b>11</b> 0	0 0 <b>38</b>

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This was asked of only respondents who said they spoke a language other than English at home.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This was asked of only respondents who said they spoke a language other than English at home.

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Table D.16. Census Question P17A—Has This Person Ever Been on Active-Duty Military Service in the Armed Forces of the United States or Ever Been in the United States Military Reserves or the National Guard?—Unedited: 1990 Census

Reinterview classification	Census classification								
	Total	Not reported <sup>1</sup>	Reported	1	2	3	4		
Total		7,157 5,771 1,386	22,490 4,126 <b>18,364</b>	239 50 <b>189</b>	3,150 483 <b>2,667</b>	381 55 <b>326</b>	18,720 3,538 <b>15,182</b>		
Item responses:									
Yes, now on active duty		3 172	96 2,758	<b>93</b> 77	1 <b>2,521</b>	2 65	0 95		
only	366 16,355	20 1,191	346 15,164	5 14	51 94	<b>245</b> 14	45 <b>15,042</b>		

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older.

Table D.17. Census Question P17B1—Was Active-Duty Military Service During September 1980 or Later?— **Unedited: 1990 Census** 

Reinterview classification		Census classification							
	Total	Not reported <sup>1</sup>	Reported <sup>2</sup>	1	2				
Total	29,647 27,220 2,427	26,497 26,186 311	3,150 1,034 <b>2,116</b>	218 90 <b>128</b>	2,932 944 <b>1,988</b>				
Item responses:									
1. Yes	216 2,211	55 256	161 1,955	<b>120</b> 8	41 <b>1,947</b>				

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older.

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

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Table D.18. Census Question P17B2—Was Active-Duty Military Service During May 1975 to August 1980?— **Unedited: 1990 Census** 

Reinterview classification	Census classification							
	Total	Not reported <sup>1</sup>	Reported <sup>2</sup>	1	2			
Total	29,647 27,220 2,427	26,497 26,186 311	3,150 1,034 <b>2,116</b>	227 76 <b>151</b>	2,923 958 <b>1,965</b>			
Item responses:								
1. Yes	261 2,166	34 277	227 1,889	<b>146</b> 5	81 <b>1,884</b>			

Table D.19. Census Question P17B3—Was Active-Duty Military Service During Vietnam Era (August 1964 to April 1975)—Unedited: 1990 Census

Reinterview classification	Census classification						
	Total	Not reported <sup>1</sup>	Reported <sup>2</sup>	1	2		
Total	29,647 27,220 2,427	26,497 26,186 311	3,150 1,034 <b>2,116</b>	967 288 <b>679</b>	2,183 746 <b>1,437</b>		
Item responses:							
1. Yes	825 1,602	104 207	721 1,395	<b>665</b> 14	56 <b>1,381</b>		

Table D.20. Census Question P17B4—Was Active-Duty Military Service During February 1955 to July 1964?— **Unedited: 1990 Census** 

Reinterview classification	Census classification							
	Total	Not reported <sup>1</sup>	Reported <sup>2</sup>	1	2			
Total	29,647 27,220 2,427	26,497 26,186 311	3,150 1,034 <b>2,116</b>	499 140 <b>359</b>	2,651 894 <b>1,757</b>			
Item responses:								
1. Yes	685 1,742	74 237	611 1,505	<b>353</b> 6	258 <b>1,499</b>			

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

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Table D.21. Census Question P17B5—Was Active-Duty Military Service During the Korean Conflict (June 1950 to January 1955)?—Unedited: 1990 Census

Reinterview classification -	Census classification							
	Total	Not reported <sup>1</sup>	Reported <sup>2</sup>	1	2			
Total	29,647 27,220 2,427	26,497 26,186 311	3,150 1,034 <b>2,116</b>	603 177 <b>426</b>	2,547 857 <b>1,690</b>			
Item responses:								
1. Yes	504 1,923	53 258	451 1,665	<b>410</b> 16	41 <b>1,649</b>			

Table D.22. Census Question P17B6—Was Active-Duty Military Service During World War II (September 1940 to July 1947)?—Unedited: 1990 Census

Reinterview census		Census classification							
	Total	Not reported <sup>1</sup>	Reported <sup>2</sup>	1	2				
Total	29,647 27,220 2,427	26,497 26,186 311	3,150 1,034 <b>2,116</b>	1,109 359 <b>750</b>	2,041 675 <b>1,366</b>				
Item responses:									
1. Yes	851 1,576	88 223	763 1,353	<b>740</b> 10	23 <b>1,343</b>				

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

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Table D.23. Census Question P17B7—Was Active-Duty Military Service During World War I (April 1917 to November 1918)?—Unedited: 1990 Census

Reinterview classification	Census classification							
	Total	Not reported <sup>1</sup>	Reported <sup>2</sup>	1	2			
Total  Not reported <sup>3</sup> Reported	29,647 27,220 2,427	26,497 26,186 311	3,150 1,034 <b>2,116</b>	9 8 1	3,141 1,026 <b>2,115</b>			
Item responses:								
1. Yes	15 2,412	0 311	15 2,101	<b>1</b> 0	14 <b>2,101</b>			

Table D.24. Census Question P17B8—Was Active-Duty Military Service During Any Other Time?—Unedited: 1990 Census

Reinterview classification		Census classification							
	Total	Not reported <sup>1</sup>	Reported <sup>2</sup>	1	2				
Total		26,497 26,186 311	3,150 1,034 <b>2,116</b>	57 29 <b>28</b>	3,093 1,005 <b>2,088</b>				
Item responses:									
1. Yes	225 2,202	16 295	209 1,907	<b>10</b> 18	199 <b>1,889</b>				

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

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Table D.25a. Census Question P17C—In Total, How Many Years of Active-Duty Military Service Has This Person Had?—Edited: 1990 Census

Deietenien						Census cl	assification					
Reinterview classification	Total	Not re- ported <sup>1</sup>	Re- ported <sup>2</sup>	1	2	3	4	5	6	7	8	9
Total	27,983 26,591 1,392	24,486 24,437 49	3,497 2,154 <b>1,343</b>	295 218 <b>77</b>	950 604 <b>346</b>	840 522 <b>318</b>	764 449 <b>315</b>	141 87 <b>54</b>	136 85 <b>51</b>	40 24 <b>16</b>	41 19 <b>22</b>	30 16 <b>14</b>
Item responses:												
1. 1 year	90 345 316 306 67	6 15 11 6 1	84 330 305 300 66	36 22 12 4 2	33 <b>244</b> 37 15	7 39 <b>206</b> 41 7	3 17 41 <b>222</b> 19	1 1 4 10 <b>24</b>	2 3 3 6 5	0 0 1 0 2	0 2 1 0 2	1 0 0 1 1
6. 6 years	52 17 25 9 14	3 0 2 0 0	49 17 23 9 14	0 0 0 1 0	2 0 2 0 0	8 1 0 2 0	5 1 2 0 0	5 3 2 0 1	25 2 0 1 0	2 7 4 0 0	0 3 <b>9</b> 2 2	2 0 2 <b>3</b> 4
11. 11 years. 12. 12 years. 13. 13 years. 14. 14 years. 15. 15 years.	8 8 5 5 4	0 0 0 0 1	8 8 5 5 3	0 0 0 0	0 2 0 0	0 1 1 0 0	0 0 0 1 0	1 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
16. 16 years. 17. 17 years. 18. 18 years. 19. 19 years. 20. 20 years.	5 2 2 7 34	0 0 0 0 3	5 2 2 7 31	0 0 0 0	0 0 0 0 2	0 0 0 0	0 0 0 1 1	0 0 0 0	0 0 0 1	0 0 0 0	0 0 0 0	0 0 0 0
21. 21 years	18 9 7 3	0 0 0 1 0	18 9 7 2 3	0 0 0 0	1 0 0 0	0 0 0 0	0 0 0 0	1 0 0 0	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0
26. 26 years	7 1 3 2 3	0 0 0 0	7 1 3 2 3	0 0 0 0	0 0 0 1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
31. 42 years. 32. 43 years. 33. 50 years. 34. 52 years. 35. 53 years.	1 2 1 1 3	0 0 0 0	1 2 1 1 3	0 0 0 0	1 0 0 1	0 2 1 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
36. 54 years. 37. 60 years. 38. 62 years. 39. 63 years. 40. 70 years.	1 1 1 1	0 0 0 0	1 1 1 1	0 0 0 0	0 1 1 0 0	0 0 0 1 0	0 0 0 0	1 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
41. 74 years	1 1	0	1 1	0	0 0	0	1 0	0 0	0	0	0	0

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

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Table D.25a. Census Question P17C—In Total, How Many Years Of Active-Duty Military Service Has This Person Had?—Edited: 1990 Census—Con.

Reinterview								C	ensus c	assifica	tion—C	on.							
classification	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Total	57 33 <b>24</b>	12 7 <b>5</b>	17 12 <b>5</b>	5 2 <b>3</b>	5 0 <b>5</b>	8 3 <b>5</b>	14 8 <b>6</b>	<b>0</b>	2 0 <b>2</b>	4 2 <b>2</b>	48 19 <b>29</b>	22 11 <b>11</b>	14 5 <b>9</b>	12 7 <b>5</b>	8 4 <b>4</b>	3 1 <b>2</b>	9 6 <b>3</b>	7 4 3	3 1 <b>2</b>
Item responses:																			
1. 1 year	0 1 0 1 0 0 0 2	1 0 0 0 0 0 0	0 1 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 1 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
10. 10 years	7 2 2 1 0 1	0 1 1 0 0 1	0 1 <b>2</b> 1 0 0	0 1 0 <b>1</b> 1 0	0 0 0 0 <b>2</b> 1	0 1 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 1 0	0 1 0 0 1 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
16. 16 years	0 0 0 0 2 4	0 0 0 0 1	0 0 0 0 0	0 0 0 0 0	1 0 0 0 0	0 0 0 1 0	3 1 1 0 0	0 0 0 0	0 0 <b>1</b> 0 0	0 1 0 <b>1</b> 0	0 0 1 <b>21</b> 3	0 0 0 1 2 4	0 0 0 1 0	0 0 0 0 1	1 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0
21. 21 years	1 0 0 0	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 1	0 1 0 0	0 0 0	0 0 0	0 0 0	1 0 1 0	1 0 0 1	5 1 0 0	0 4 0 0	0 0 0 1 0	0 1 0 <b>0</b>	0 0 0 0	0 0 0 0 0	0 0 0 0 1
26. 26 years	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 1 0 0	0 0 0 0	0 0 0	1 0 0 0	0 <b>1</b> 0 0
31. 42 years	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
36. 55 years	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 1 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

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Table D.25a. Census Question P17C—In Total, How Many Years of Active-Duty Military Service Has This Person Had?—Edited: 1990 Census—Con.

Reinterview	Census classification—Con.													
classification	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Total	1 0 <b>1</b>	8 4 <b>4</b>	0 0 <b>0</b>	0 0 <b>0</b>	0 0 <b>0</b>	0 0 <b>0</b>	1 1 <b>0</b>	0 0 <b>0</b>	0 0 <b>0</b>	0 0 <b>0</b>	0 0 <b>0</b>	0 0 <b>0</b>	0 0 <b>0</b>	0 0 <b>0</b>
Item responses: 1. 1 year 2. 2 years 3. 3 years 4. 4 years 5. 5 years 6. 6 years 7. 7 years 8. 8 years	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	00000	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
9. 9 years	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
16. 16 years	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
21. 21 years	0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0
26. 26 years 27. 27 years 28. 28 years 29. 29 years 30. 30 years	0 1 <b>0</b> 0	0 0 1 <b>2</b>	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0
31. 42 years 32. 43 years 33. 50 years 34. 52 years 35. 53 years	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
36. 55 years 37. 60 years 38. 62 years 39. 63 years 40. 70 years 41. 74 years 42. 88 years	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 <b>0</b> 0	0 0 0 0 0 0	0 0 0 0 0 0

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

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Table D.25b. Census Question P17C—In Total, How Many Years of Active-Duty Military Service Has This Person Had?—Edited: 1990 Census (Collapsed to 5 Categories)

D	Census classification												
Reinterview classification	Total	Not reported <sup>1</sup>	Reported <sup>2</sup>	1	2	3	4	5					
Total Not reported <sup>3</sup> Reported	27,983 26,591 1,392	24,486 24,437 49	3,497 2,154 <b>1,343</b>	295 218 <b>77</b>	950 604 <b>346</b>	2,049 1,235 <b>814</b>	67 34 <b>33</b>	136 63 <b>73</b>					
Item responses:													
1. Less than 2 years. 2. 2 years. 3. 3 to 10 years. 4. 11 to 19 years. 5. 20 years or more	90 345 806 46 105	6 15 23 1 4	84 330 783 45 101	36 22 19 0	33 <b>244</b> 59 2 8	14 63 <b>704</b> 12 21	1 1 1 <b>24</b> 6	0 0 0 7 66					

Table D.26. Census Question P18A—Does This Person Have a Physical, Mental, or Other Health Condition That Has Lasted for 6 or More Months and Which Limits the Kind or Amount of Work This Person Can Do at A Job?—Unedited: 1990 Census

Deinter in un elegation	Census classification									
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2					
Total	29,647 12,902 16,745	7,056 5,889 1,167	22,591 7,013 <b>15,578</b>	2,619 1,326 <b>1,293</b>	19,972 5,687 <b>14,285</b>					
Item responses:										
1. Yes	1,733 15,012	126 1,041	1,607 13,971	<b>884</b> 409	723 <b>13,562</b>					

Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older

Table D.27. Census Question P18B—Does This Person Have a Physical, Mental, or Other Health Condition That Has Lasted for 6 or More Months and Which Prevents This Person From Working at a Job?— **Unedited: 1990 Census** 

Daintan in un algorification	Census classification									
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2					
Total	29,647 27,941 1,706	7,757 7,599 158	21,890 20,342 <b>1,548</b>	1,943 1,328 <b>615</b>	19,947 19,014 <b>933</b>					
Item responses:										
1. Yes	931 775	86 72	845 703	<b>550</b> 65	295 <b>638</b>					

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This includes current military personnel and all civilians with no military service.

<sup>2</sup>This question was asked of only persons reporting active-duty military service in the past, but not now; that is, civilian veterans.

<sup>3</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This includes current military personnel and all civilians with no military service.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons between 15 and 65 years of age.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons between 15 and 65 years of age. 
Includes only persons who reported "Yes" to CRS question 33a.

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Table D.28. Census Question P19A—Because of a Health Condition That Has Lasted for 6 or More Months,
Does This Person Have Any Difficulty Going Outside the Home Alone, for Example, to Shop or Visit
a Doctor's Office?—Unedited: 1990 Census

Dainten iaux elegation	Census classification										
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2						
Total	29,647 9,639 20,008	7,336 5,745 1,591	22,311 3,894 <b>18,417</b>	943 203 <b>740</b>	21,368 3,691 <b>17,677</b>						
Item responses:											
1. Yes	812 19,196	70 1,521	742 17,675	<b>406</b> 334	336 <b>17,341</b>						

Table D.29. Census Question P19B—Because of a Health Condition That Has Lasted for 6 or More Months, Does This Person Have Any Difficulty Taking Care of His or Her Own Personal Needs, Such as Bathing, Dressing, or Getting Around Inside the Home?—Unedited: 1990 Census

Deinterview elegation	Census classification									
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2					
Total	29,647 9,837 19,810	7,504 5,825 1,679	22,143 4,012 <b>18,131</b>	992 234 <b>758</b>	21,151 3,778 <b>17,373</b>					
Item responses:										
1. Yes	413 19,397	37 1,642	376 17,755	<b>161</b> 597	215 <b>17,158</b>					

Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older.

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older <sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older.

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Table D.30. Census Question P30—Was This Person. . .?—Unedited: 1990 Census (Uses Reinterview Recode)

					Cer	sus classific	ation				
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2	3	4	5	6	7	8
Total	29,647 16,384 13,263	12,954 11,497 1,457	16,693 4,887 <b>11,806</b>	11,339 3,405 <b>7,934</b>	996 258 <b>738</b>	1,099 292 <b>807</b>	778 197 <b>581</b>	641 188 <b>453</b>	1,207 328 <b>879</b>	454 107 <b>347</b>	179 112 <b>67</b>
Item responses											
Employee of a PRIVATE FOR PROFIT company or of an individual, for wages, salary or commissions	8,806	978	7,828	7,280	170	60	41	28	142	88	19
Employee of a PRIVATE NOT- FOR-PROFIT, tax exempt, or charitable organization	763	60	703	176	464	28	15	5	10	3	2
3. Local GOVERNMENT employee.	968	112	856	84	54	617	83	8	6	2	2
4. State GOVERNMENT employee.	668	63	605	45	34	82	429	12	2	0	1
5. Federal GOVERNMENT employee	498	37	461	32	5	14	7	398	4	1	0
SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm	1,118	157	961	196	10	5	4	2	659	61	24
7. SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm	375	32	343	102	1	1	2	0	42	190	5
8. Working WITHOUT PAY in family business or farm	67	18	49	19	0	0	0	0	14	2	14

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older who reported working in 1985 or later.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older who reported working since January 1, 1989 or later.

Table D.31. Census Question P31A—Last Year (1989), Did This Person Work, Even for a Few Days, at a Paid Job or in a Business or Farm?—Unedited: 1990 Census

Reinterview classification	Census classification										
Reinterview diassincation	Total	Not reported <sup>1</sup>	Reported	1	2						
Total	29,647 9,723 19,924	11,634 6,773 4,861	18,013 2,950 <b>15,063</b>	13,507 2,142 <b>11,365</b>	4,506 808 <b>3,698</b>						
Item responses:											
1. Yes	12,530 7,394	1,233 3,628	11,297 3,766	<b>10,041</b> 1,324	1,256 <b>2,442</b>						

¹Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older ²Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older.

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Table D.32. Census Question P31B—How Many Weeks Did This Person Work in 1989?—Edited: 1990 Census

	Census classification											
Reinterview classification	Total	Not report- ed <sup>1</sup>	Reported	1	2	3	4	5	6			
Total	27,983 15,709 12,274	12,526 11,589 937	15,457 4,120 <b>11,337</b>	9,821 2,164 <b>7,657</b>	702 193 <b>509</b>	1,255 345 <b>910</b>	1,153 357 <b>796</b>	1,329 514 <b>815</b>	1,197 547 <b>650</b>			
Item responses:												
1. 50-52 weeks 2. 48-49 weeks 3. 40-47 weeks 4. 27-39 weeks 5. 14-26 weeks 6. 1-13 weeks	8,660 283 722 731 827 1,051	311 13 39 55 106 413	8,349 270 683 676 721 638	6,977 156 202 121 123 78	377 <b>40</b> 44 20 16 12	433 41 <b>257</b> 112 45 22	251 16 109 <b>270</b> 101 49	192 9 52 124 <b>316</b> 122	119 8 19 29 120 <b>355</b>			

<sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older who reported working in 1985 or later.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older who reported working in 1989.

Table D.33. Census Question P31C—During the Weeks WORKED in 1989, How Many Hours Did This Person Usually Work Each Week?—Edited: 1990 Census (Collapsed to 2 Categories)

Dainten day elegation	Census classification									
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2					
Total	27,983 15,667 12,316	12,526 11,564 962	15,457 4,103 <b>11,354</b>	12,141 3,056 <b>9,085</b>	3,316 1,047 <b>2,269</b>					
Item responses:										
1. 35 hours or more	9,427 2,889	378 584	9,049 2,305	<b>8,455</b> 630	594 <b>1,675</b>					

<sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older who reported working in 1985 or later.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older who reported working in 1989.

Table D.34. Census Question P31C—During the Weeks WORKED in 1989, How Many Hours Did This Person Usually Work Each Week?—Edited: 1990 Census (Collapsed to 3 Categories)

Reinterview classification	Census classification									
Vehiterview Classification	Total	Not reported <sup>1</sup>	Reported	1	2	3				
Total		12,526 11,564 962	15,457 4,103 <b>11,354</b>	12,141 3,056 <b>9,085</b>	2,634 800 <b>1,834</b>	682 247 <b>435</b>				
Item responses:										
1. 35 hours or more	9,427 2,167 722	378 291 293	9,049 1,876 429	<b>8,455</b> 496 134	500 <b>1,208</b> 126	94 172 <b>169</b>				

<sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older who reported working in 1985 or later.

<sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older who reported working in 1989.

## **APPENDIX E. Additional Tables**

Table E.1. Questions Used to Determine Housing Subgroups

Subgroups	Question (unedited census)
Black householder Non-Black householder	Household relationship (P2), Race (P4)
Spanish/ Hispanic householder Non-Spanish/ Hispanic householder	Household relationship (P2), Spanish/Hispanic origin (P7)
Non-Black and Non-Spanish/ Hispanic householder	Household relationship (P2), Race (P4), and Spanish/Hispanic origin (P7)

Table E.2. Response Error Measures for Rent (Includes Additional Outside Payments)

		Percent	in class	Net differ	ence rate	Index of in	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
H7A: What is the Monthly Rent?	2,449	-	-	-	-	-	-
Less than \$80	-	3.8	3.4	0.3	-0.1 to 0.8	28.3	22.3 to 35.9
\$80 to \$99	-	1.9	1.4	* 0.5	0.1 to 0.9	47.1	36.1 to 61.5
\$100 to \$124	-	3.3	3.0	0.2	–0.2 to 0.7	29.5	23.0 to 37.8
\$125 to \$149	-	2.7	2.5	0.2	-0.2 to 0.7	38.5	30.4 to 48.8
\$150 to \$174	-	4.5	4.2	0.3	–0.3 to 0.8	32.2	26.3 to 39.5
\$175 to \$199	-	3.4	2.9	0.4	0.0 to 0.9	31.3	24.6 to 39.8
\$200 to \$224	-	5.5	5.9	-0.4	-0.9 to 0.2	26.2	21.5 to 32.0
\$225 to \$249 \$250 to \$274	-	3.7 5.5	3.2 5.6	0.5 -0.1	0.0 to 1.0 –0.7 to 0.5	32.9 30.6	26.3 to 41.1 25.5 to 36.9
\$275 to \$299	_	5.0	4.7	0.3	-0.7 to 0.3	33.9	28.1 to 40.8
\$300 to \$324		5.8	6.1	-0.3	-1.0 to 0.4	37.1	31.6 to 43.7
\$325 to \$349	_	4.0	3.7	0.2	-0.3 to 0.8	38.7	31.8 to 47.1
\$350 to \$374	_	5.7	5.6	0.1	-0.6 to 0.7	35.8	30.3 to 42.5
\$375 to \$399	_	5.0	4.9	0.1	-0.5 to 0.8	37.7	31.6 to 44.9
\$400 to \$424	-	5.2	5.7	-0.5	-1.2 to 0.2	42.9	36.6 to 50.3
\$425 to \$449	_	3.6	3.5	0.2	-0.4 to 0.8	48.9	40.7 to 58.6
\$450 to \$474	-	4.0	4.5	-0.5	-1.2 to 0.1	44.5	37.4 to 52.9
\$475 to \$499	-	3.8	3.3	0.4	–0.1 to 0.9	36.9	30.0 to 45.5
\$500 to \$524	-	3.0	3.4	-0.4	–0.9 to 0.1	38.4	30.9 to 47.6
\$525 to \$549	-	2.0	1.6	0.4	–0.1 to 0.8	46.9	36.3 to 60.6
\$550 to \$599	-	4.6	4.6	0.0	–0.6 to 0.6	34.6	28.6 to 41.9
\$600 to \$649	-	2.6	3.8	<b>* –</b> 1.1	–1.7 to –0.6	39.7	32.1 to 49.1
\$650 to \$699	-	2.9	2.8	0.0	–0.5 to 0.5	39.2	31.3 to 49.2
\$700 to \$749	-	2.3	2.5	-0.2	–0.6 to 0.2	33.6	25.8 to 43.7
\$750 to \$999	-	4.5	4.9	-0.4	-0.8 to 0.1	18.8	14.5 to 24.3
\$1,000 or more	-	1.8	2.1	-0.3	–0.5 to 0.0	14.0	8.9 to 21.9
L-fold							
Total units:	2,449	-	-	-	-	35.0	33.4 to 36.7
Black householder	366	-	-	-	-	46.5	42.4 to 51.4
Non-black householder	2,023 232	-	-	_	-	32.8 42.0	31.1 to 34.6 37.1 to 48.2
Non-Spanish/ Hispanic householder	2,098			]		34.4	32.8 to 36.3
Non-black and non-Spanish/ Hispanic	2,030					04.4	02.0 10 00.0
householder	1,744	-	-		-	32.1	30.2 to 34.0

<sup>\*</sup> Indicates significance at the 10-percent level.

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Table E.3. Census Question H7A—What Is the Monthly Rent?—Unedited: 1990 Census (Includes Additional Outside Payments)

						C	ensus cla	ssificatio	n					
Reinterview classification	Total	Not re- ported <sup>1</sup>	Re- ported	1	2	3	4	5	6	7	8	9	10	11
Total	12,872 10,256 2,616	8,944 8,777 167	3,928 1,479 <b>2,449</b>	173 81 <b>92</b>	63 16 <b>47</b>	118 38 <b>80</b>	99 32 <b>67</b>	166 57 <b>109</b>	130 47 <b>83</b>	222 87 <b>135</b>	159 68 <b>91</b>	220 85 <b>135</b>	201 78 <b>123</b>	236 94 <b>142</b>
Item responses:														
1. Less than \$80	96 36 84 70 112	12 1 10 9 10	84 35 74 61 102	<b>64</b> 5 2 1 0	7 <b>22</b> 8 0 0	3 3 <b>55</b> 9 3	0 1 2 <b>40</b> 11	1 0 2 8 <b>73</b>	1 0 0 1 6	3 2 2 0 2	1 0 2 0 0	2 0 1 0 1	0 0 0 1 1	1 0 0 0 1
6. \$175 to \$199	79 157 84 145 121	7 13 5 7 5	72 144 79 138 116	1 3 2 4 1	1 3 0 2 0	1 1 1 1 0	1 2 0 2 1	7 5 0 3 3	<b>54</b> 11 1 1	1 <b>105</b> 9 4 2	0 4 <b>58</b> 13 1	1 5 4 <b>97</b> 9	1 1 0 5 <b>81</b>	1 3 1 0 9
11. \$300 to \$324	164 96 146 127 148	14 5 8 7 9	150 91 138 120 139	1 1 1 0 1	0 0 0 1 2	0 1 0 1 1	2 0 0 1 0	2 0 3 0 0	2 1 2 0 0	1 0 1 0	3 4 0 1 2	7 1 2 1 1	19 5 1 4 1	<b>95</b> 12 9 3 3
16. \$425 to \$449	88 116 86 89 41	3 5 4 6 1	85 111 82 83 40	1 0 0 0	0 0 0 0	0 0 0 0	1 1 1 0 0	0 0 1 0	1 0 0 0	0 0 0 0	0 1 0 1 0	1 0 0 0	0 0 0 0	1 1 0 0 0
21. \$550 to \$599 22. \$600 to \$649 23. \$650 to \$699 24. \$700 to \$749 25. \$750 to \$999 26. \$1,000 or more.	119 95 72 65 125 55	7 3 3 3 6 4	112 92 69 62 119 51	0 0 1 1 2 0	0 1 0 0 0	0 0 0 0 0	0 0 0 0 1	0 0 1 0 0	0 0 0 0 0	0 0 0 1 1 0	0 0 0 0 0	0 0 0 0 1 1	2 0 0 1 0	0 1 1 0 0

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only renters.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth). This question was asked of only renters.

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Table E.3. Census Question H7A—What Is the Monthly Rent?—Unedited: 1990 Census (Includes Additional Outside Payments)—Con.

Reinterview							Census c	lassificat	tion—Co	n.		Г			
classification	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Total	162 65 <b>97</b>	214 74 <b>140</b>	186 63 <b>123</b>	213 86 <b>127</b>	144 55 <b>89</b>	146 48 <b>98</b>	132 40 <b>92</b>	124 51 <b>73</b>	76 27 <b>49</b>	174 62 <b>112</b>	105 41 <b>64</b>	108 38 <b>70</b>	91 34 <b>57</b>	185 75 <b>110</b>	81 37 <b>44</b>
Item responses:															
1. Less than \$80 2. \$80 to \$99 3. \$100 to \$124 4. \$125 to \$149 5. \$150 to \$174	0 0 0 1 1	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
6. \$175 to \$199 7. \$200 to \$224 8. \$225 to \$249 9. \$250 to \$274 10. \$275 to \$299	0 0 0	0 0 0 2 4	1 0 1 1	0 0 0 0	0 0 0 0	0 1 0 1 0	1 0 2 0 1	0 0 0 0	0 0 0 1	1 0 0 0	0 0 0 1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
11. \$300 to \$324	8 <b>59</b> 19 4 2	3 3 <b>92</b> 17 8	3 0 2 <b>78</b> 26	2 1 4 5 <b>79</b>	1 1 0 1 5	0 0 0 1 5	0 2 1 0 0	0 0 1 1 0	0 0 0 0	0 0 0 0	0 0 0 1 0	0 0 0 0	0 0 0 0	1 0 0 0 1	0 0 0 0
16. \$425 to \$449	0 0 0 0	2 4 2 0 0	3 2 0 3 0	19 8 3 1 0	<b>46</b> 24 6 1 0	6 <b>60</b> 9 7 3	2 6 <b>56</b> 13 2	2 2 2 <b>49</b> 7	0 0 0 3 <b>24</b>	0 1 2 4 1	0 1 0 1 2	0 0 0 0	0 0 0 0 1	0 0 0 0	0 0 0 0
21. \$550 to \$599	0 0 1 2 0	0 1 0 0 0	1 0 1 0 0	1 1 2 1 0	1 1 0 0 0	2 0 0 0 1	2 3 1 0 0	5 3 0 0 0	13 3 3 1 1	<b>75</b> 18 4 1 2	4 48 6 0 0	2 9 <b>43</b> 9 6	2 1 4 <b>40</b> 9	2 1 1 4 <b>94</b> 6	0 1 0 1 1 41

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only renters.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, household refusals, movers, vacants, and other noninterviews (that is, households with language barriers, all household members ill, hospitalized, or temporarily absent during the entire survey period, and so forth). This question was asked of only repters

Table E.4. Indexes of Inconsistency and Net Difference Rates for Year Built: Owner Occupied Units

	Percent	in class	Net differ	ence rate	Index of ind	Index of inconsistency		
Year built	Census <sup>1</sup>	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval		
1989 or 1990 1985 to 1988 1980 to 1984 1970 to 1979 1960 to 1969 1950 to 1959 1940 to 1949 1939 or earlier	1.1 8.1 8.2 22.7 16.0 16.0 8.8 19.0	1.6 8.5 8.3 22.8 15.9 15.0 8.0 19.9	*-0.4 *-0.4 0.0 -0.1 0.0 *1.0 *0.8 *-0.9	-0.7 to -0.2 -0.8 to -0.1 -0.5 to 0.4 -0.6 to 0.5 -0.5 to 0.6 0.4 to 1.6 0.3 to 1.3 -1.4 to -0.4		41.0 to 58.0 20.0 to 24.8 29.8 to 35.6 22.1 to 25.3 30.7 to 35.1 32.0 to 36.5 44.3 to 51.3 24.4 to 25.9		
L-fold index					30.1	29 .1 to 31.2		

<sup>\*</sup> Indicates significance at the 10-percent level.

Table E.5. Indexes of Inconsistency and Net Difference Rates for Year Built: Renter Occupied Units

	Percent	in class	Net differ	ence rate	Index of inconsistency		
Year built	Census <sup>1</sup>	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval	
1989 or 1990	1.1	1.4	-0.4	-0.8 to 0.1	62.3	46.6 to 83.2	
1985 to 1988	8.7	7.8	1.0	0.0 to 1.9	42.8	37.2 to 49.3	
1980 to 1984	10.5	9.2	* 1.3	0.2 to 2.5	57.0	51.3 to 63.5	
1970 to 1979	21.9	22.6	-0.7	-2.3 to 0.9	57.1	53.1 to 61.4	
1960 to 1969	15.8	15.2	0.6	-0.9 to 2.1	67.1	62.1 to 72.6	
1950 to 1959	12.7	12.0	0.7	-0.7 to 2.1	70.2	64.5 to 76.5	
1940 to 1949	9.2	9.1	0.1	-1.1 to 1.3	69.1	62.6 to 76.4	
1939 or earlier	20.2	22.8	<b>* -</b> 2.6	−4.0 to −1.2	44.0	40.4 to 48.0	
L-fold index					57.7	55.6 to 59.9	

<sup>\*</sup> Indicates significance at the 10-percent level.

Table E.6. Questions Used to Determine Population Subgroups

Subgroups	Question (unedited census)
Male Female	Sex (P3)
White Black Other	Race (P4)
Native born Foreign born	Citizenship (P9)
Hispanic Non-Hispanic	Spanish/ Hispanic origin (P7)

<sup>&</sup>lt;sup>1</sup> Final edited/ allocated census values.

<sup>&</sup>lt;sup>1</sup> Final edited/ allocated census values.

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Table E.7. Response Errors for Census Question P31A (With Reinterview Recodes)

		Percent	in class	Net differ	ence rate	Index of ind	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
P31A: Last Year (1989), Did This Person Work, Even for a Few Days, at a Paid Job or in a Business or a Farm?	14,921						
Yes	-	75.4	77.9	* <i>-</i> 2.5	-3.1 to-2.0	44.6	43.2 to 46.0
No	-	24.6	22.1	* 2.5	2.0 to 3.1	44.6	43.2 to 46.0
L-fold:							
Total persons	14,921	75.4	77.9	* <i>-</i> 2.5	-3.1 to -2.0	44.6	43.2 to 46.0
Male <sup>1</sup>	7,529	79.1	82.0	<b>* -</b> 2.8	-3.6 to -2.1	49.5	47.4 to 51.8
Female <sup>1</sup>	7,326	71.6	73.8	* <i>-</i> 2.1	−2.9 to −1.4	41.3	39.5 to 43.1
White <sup>1</sup>	12,943	75.8	78.4	* <i>-</i> 2.6	–3.1 to –2.0	42.8	41.4 to 44.3
Black <sup>1</sup> Other <sup>1</sup>	1,139 641	70.3 76.9	73.0 78.3	* –2.6 –1.4	-4.9 to -0.4 -4.4 to 1.6	50.9 62.4	46.4 to 56.1 55.3 to 70.7

<sup>\*</sup> Indicates significance at the 10-percent level. 

¹Results for the category "Yes."

or in a Business or Farm?—Unedited: 1990 Census (With Reinterview Recodes)

Table E.8. Census Question P31A—Last Year (1989), Did This Person Work, Even for a Few Days, at a Paid Job

Reinterview classification	Census classification								
Reinterview classification	Total	Not reported <sup>1</sup>	Reported	1	2				
Total Not reported <sup>2</sup>	29,647 9,941 <b>19,706</b>	11,634 6,849 <b>4,785</b>	18,013 3,092 <b>14,921</b>	13,507 2,257 <b>11,250</b>	4,506 835 <b>3,671</b>				
Item responses:									
Yes	12,998 6,708	1,372 3,413	11,626 3,295	<b>10,247</b> 1,003	1,379 <b>2,292</b>				

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older

Not applicable.

<sup>...</sup> Not sufficient data to compute reliable response error measures.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older.

Table E.9. Response Errors for Census Question P17A (Edited Census Data)

		Percent	in class	Net differ	ence rate	Index of in	consistency
Census questions and categories	Sample size	Census	CRS	Estimate	90-percent confidence interval	Estimate	90-percent confidence interval
P17A: Has This Person Ever Been on Active-Duty Military Service?	18,253	-	-	-	-	-	-
Yes, now on active duty	-	0.5	0.4	0.1	0.0 to 0.1	28.5	22.4 to 36.3
Yes, on active duty in past, but not now Yes, service in Reserves or National	-	15.6	15.5	0.0	-0.1 to 0.2	8.4	7.7 to 9.1
Guard only	-	1.8	1.9	-0.1	-0.2 to 0.0	30.0	26.7 to 33.7
No	-	82.1	82.1	0.0	-0.2 to 0.1	5.8	5.3 to 6.4
L-fold:							
Total persons	18,253	-	-	-	-	8.8	8.1 to 9.4
Male	8,508	-	-	-	-	9.7	8.9 to 10.5
Female	9,745	-	-	-	-	32.6	26.8 to 39.6
White	15,799	-	-	-	-	7.9	7.3 to 8.6
Black	1,577	-	-	-	-	18.5	15.1 to 22.8
Other	877	-	-	-	-	16.3	11.4 to 23.4

<sup>\*</sup> Indicates significance at the 10-percent level.

Table E.10. Census Question P17A—Has This Person Ever Been on Active-Duty Military Service in the Armed Forces of the United States or Ever Been in the United States Military Reserves or the National Guard?—Edited: 1990 Census

	Census classification								
Reinterview classification	Total	Not report- ed <sup>1</sup>	Reported	1	2	3	4		
Total  Not reported <sup>2</sup> Reported	27,983 9,112 18,871	5,965 5,347 618	22,018 3,765 <b>18,253</b>	116 27 <b>89</b>	3,381 537 <b>2,844</b>	387 55 <b>332</b>	18,134 3,146 <b>14,988</b>		
Item responses:									
Yes, now on active duty	74	1	73	58	12	3	0		
Yes, on active duty in past, but not now	2,842	7	2,835	23	2,638	68	106		
Yes, service in reserves or national									
guard only	354	3	351	2	61	241	47		
No	15,601	607	14,994	6	133	20	14,835		

<sup>&</sup>lt;sup>1</sup>Not reported includes individual item nonresponse. This question was asked of only persons 15 years or older

<sup>-</sup> Not applicable

<sup>...</sup> Not sufficient data to compute reliable response error measures.

<sup>&</sup>lt;sup>2</sup>Not reported includes individual item nonresponse, person refusals, movers, and other noninterviews (that is, persons with language barriers, persons who were ill, hospitalized, or temporarily absent, deceased, and so forth). This question was asked of only persons 15 years or older.

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The following are a series of reports documenting the content development of the 1990 Census of Population and Housing. They are an invaluable source of information for detailed steps leading to the determination of the questions pertaining to a specific topic. The history of the item and changes from the 1980 census are discussed in each report. These reports are referred to for background information for many of the topics in this report.

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This Census of Population and Housing Evaluation and Research Report is designed to inform the public about the decennial census evaluation program and results for its major content evaluation. If you would like additional information on anything presented in this publication, please write to:

Mr. John H. Thompson Chief, Decennial Statistical Studies Division Bureau of the Census Washington, DC 20233

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